# Healthy Illinois 2021 Plan Update

An Addendum to the Illinois 2016-2021 State Health Assessment and State Health Improvement Plan

Illinois Department of Public Health December 2020



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Dear Illinois Stakeholders:

The Illinois Department of Public Health (IDPH) appreciates your interest in the Healthy Illinois 2021 Initiative. In January 2016, IDPH and its partners embarked on Healthy Illinois 2021 Initiative with the publication of the State Health Assessment (SHA) which was followed that same year by the State Health Improvement Plan (SHIP). Healthy Illinois 2021 is a culmination of a statewide collaboration designed to improve the health of all Illinoisans. IDPH and its partners coordinated stakeholders representing local health agencies, hospitals, academia as well as a broad spectrum of health providers in this initiative. Core health priorities identified in the SHA included behavioral health, chronic disease, and maternal and child health. Interventions, strategies addressing these core health issues were documented in the State Health Improvement Plan (SHIP). Healthy Illinois 2021 provides an opportunity for all Illinois's residents to reach their best health.

In August 2020, IDPH convened a SHIP Team and Planning Team to provide an update to the SHA and inform the update to the SHIP. IDPH, the University of Illinois Chicago Policy, Practice and Prevention Research Center (P3RC) and their subcontractor, the Illinois Public Health Institute (IPHI) forming the Planning Team, worked collaboratively with the SHIP Team composed of representatives from the state public health system and community partners to help adhere to Illinois law, inform programmatic needs, and guide priorities for the next eighteen months.

This document, Healthy Illinois 2021 Plan Update, resulting from this collaborative effort, is an addendum to the Illinois 2016 -2021 SHA and SHIP. The update identifies emerging and enduring issues including COVID-19, structural racism, capabilities and capacities of the public health system, and health status related to major public health issues to provide a more accurate understanding of the landscape of the public health system. The document provides key findings and determines priorities and strategies for the next eighteen months. IDPH and its public health system partners will complete a more comprehensive, equity driven SHA/SHIP between January 1, 2021 and June 30, 2022.

We appreciate the efforts and dedication of our public health system partners in this process and look forward to a continued collaboration.

Lehn)

Ngozi O. Ezike, MD Director, Illinois Department of Public Health

#### Acknowledgements

#### State Health Improvement Plan (SHIP) Team

The SHIP Team was responsible for reviewing updated State Health Assessment (SHA) data and using the findings from the data to update the Healthy Illinois 2021 SHIP for the next 18 months.

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#### The Planning Team

The Illinois Department of Public Health (IDPH) Team in partnership with the University of Illinois Chicago Policy, Practice and Prevention Research Center (P3RC) and the Illinois Public Health Institute (IPHI), (herein referred to as the Planning Team) was responsible for designing and leading the data collection, analysis, and facilitation of the SHIP Team to arrive at an update of the Healthy Illinois 2021 plan.

#### Illinois Department of Public Health (IDPH) Team

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#### Introduction

A State Health Assessment (SHA) is a systemic approach to collecting, analyzing, and using data to educate and mobilize communities, develop, priorities, garner resources, and plan actions to improve the public's health. A State Health Improvement Plan (SHIP) is a long-term systematic plan to address issues identified in the SHA. The SHIP describes how the state health department, the public health system, and the community will work together to improve the health of the population. Completed in 2016, the Healthy Illinois 2021 action plan was developed to serve as the SHA/SHIP for Illinois. Healthy Illinois 2021 identified three priorities for action planning with social determinants of health (SDOH) and access to quality care as implementation requirements. The health priorities were identified as: behavioral health, chronic disease, and maternal and child health.

In accordance with the requirements of the Illinois law, PA 93-0975, the Illinois Department of Public Health (IDPH) must complete a new five-year SHIP by 2021. Due to the urgent and all-encompassing need for IDPH to respond to the COVID-19 pandemic that required the time and effort of not only state but local public and private resources at unprecedented levels, the Department was unable to engage in a comprehensive SHA and SHIP process. In addition, widespread public demonstration to combat racial injustice raised the importance of examining structural racism as an issue to consider in relation to health priorities in the landscape of the public health system in Illinois. Therefore, to update the SHA, data were collected on the emerging health issues, including COVID-19 and structural racism, the capabilities and capacities of the public health system, and health status related to major public health issues to inform a more accurate understanding of the landscape of the public health system in relation to the Healthy 2021 priorities. IDPH, the University of Illinois Chicago Policy, Practice and Prevention Research Center (P3RC) and their subcontractor, the Illinois Public Health Institute (IPHI), herein referred to as the Planning Team, worked collaboratively to update the SHA/SHIP from August 2020 to December 2020 to adhere to Illinois law and guide priorities for the next eighteen months while IDPH and its public health system partners complete a more comprehensive, equity driven SHA/SHIP between January 1, 2021 and June 30, 2022. To launch the work, P3RC in partnership with IDPH and IPHI, was able to leverage its funding and expertise to support the update to the SHA/SHIP to achieve some of its directives. This project alignment intends to use the findings from the data collection and update to support future capacity building efforts that support the SHA/SHIP.

Between August 2020 and December 2020, the Planning Team engaged community partners and stakeholders to review the current state of the 2016 public health priorities, identify emerging issues, and address where improvement should be focused over the next 18 months prior to the completion of the comprehensive SHA/SHIP in June 2022. In addition, the IDPH convened a multi-sector SHIP Team to review updated data for the SHA, identify key findings and determine priorities and strategies to move forward as an update to the Healthy Illinois 2021 SHIP.

The components of the SHA/SHIP update include<sup>1</sup>:

- 1. Updated data on the existing 2016 SHA
- 2. Update to the 2016 SHIP topical domains, health topics, health status, and behavioral factors at the state level.
- 3. Landscape scan on existing 2016 SHA/SHIP topics, emerging issues, and the public health system through:
  - a. an external stakeholder survey of Illinois local health departments (LHD),
  - b. an internal survey to IDPH staff and the Illinois State Board of Health,
  - c. a review of existing LHD Illinois Project for Local Assessment of Needs (IPLAN) priorities and strategies, and
  - d. 5 virtual focus groups with key community and institutional stakeholders with investment in the Healthy Illinois 2021 priorities and the emerging issues.
- 4. Three SHIP Team planning meetings to discuss results of the updated data and the landscape scan and determine priorities for the next 18 months

#### **Executive Summary**

The health priorities selected in Healthy Illinois 2021 included behavioral health, chronic disease, and maternal and child health with social determinants of health and access to care as implementation requirements to address health improvement in these areas.

Findings from the 2020 SHA update, including the data analysis and landscape scan, indicated the Healthy Illinois 2021 priorities are still relevant and, in some cases, showed increased disparities. In addition, data showed that the public health threat of COVID-19 continues to be at the forefront of the Illinois public health system's priorities as well as a need for intentional and targeted efforts to improve the public health infrastructure. The SHIP Team used the findings from the data to inform the vision of an 18-month plan to be implemented while a more comprehensive equity driven 2021 SHA/SHIP process is conducted beginning January 2021 The Team identified what could be improved across the public health system over the next 18-months including: more collaboration; improved legislative support for public health; improved public health system infrastructure and capacity; improved and consistent communication and messaging; improved data driven health models; and improved resource planning beyond COVID-19. The Team stated that improving in these critical areas will lead to improved outcomes such as decreases in health disparities based on race, improved mental and behavioral health, increased access to care, and preventative maternal and child health. See figure 1.

<sup>1</sup> In July 2020, the University of Illinois Chicago (UIC) Institutional Review Board (IRB) determined these activities as non-human subjects research.

#### Figure 1. SHIP Team Vision for Success Plan.

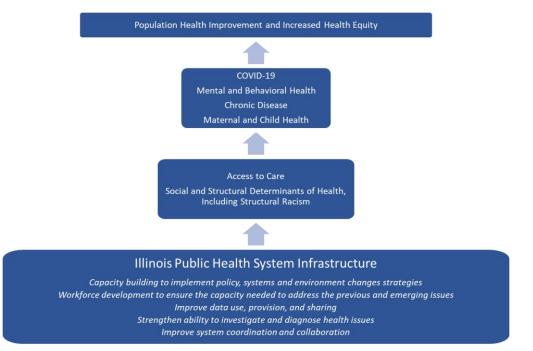
- More Collaboration
- Increased Legislative Support
- Improved Infrastructure and Capacity
   Building
- Improved and Consistent/Shared Communication and Messaging
- Improved Health Models that are Data Driven/Data Sharing
- Improved Resource Planning Outside of COVID-19

• Decrease in Health Disparities Based on Race

- Improved Behavioral and Mental Health
- Increased Access to Care
- Preventative Maternal and Child Health Care

Based on this shared vision and the discussion and analysis of all updated data, the SHIP Team identified that the Healthy Illinois 2021 priorities remain the same in addition to COVID-19. Further, the Team identified that racism and equity, and the strengthening the public health system with an emphasis on workforce development and capacity, improved data systems and data utilization have the greatest potential impact on the health of Illinoisans over the next 18 months. See Figure 2 below.





This report details the data collection process and findings, SHIP Team recommendations and outcomes of the SHA/SHIP update the new and updated priorities selected for the next 18 months.

#### **Planning Process and Methodology**

The planning process to update the Healthy Illinois 2021 SHA/SHIP included the following components.

- 1. Team Formation
  - Planning Team
  - Appointment of SHIP Team
- 2. Landscape Scan Including: Data Collection, Analysis and Synthesis
  - IPLAN Priorities and Strategies Analysis
  - Population and Health Status Update
  - Local Health Department (LHD) Stakeholder Survey
  - Staff/State Board of Health (SBOH) Survey
  - 5 Stakeholder Focus Groups
- 3. SHIP Team Meetings
  - 3 pre-recorded webinars with process and data information
  - 3 virtual interactive meetings

#### **Internal Planning Team**

IDPH engaged the University of Illinois Chicago Policy, Practice and Prevention Research Center (P3RC) who subcontracted with the Illinois Public Health Institute (IPHI) to form a partnership with IDPH to lead the process. The three institutions formed an internal "Planning Team" that met weekly to review progress and timelines and solicit feedback on draft documents, tools, and data. The P3RC and IPHI also met weekly and co-developed the SHA/SHIP update design process, data collection instruments, and meeting agendas and materials. The P3RC and IPHI also worked together to conduct the data analysis and presentations, co-facilitated the SHIP Team meetings, and developed the summary report. This team was responsible for leading the data collection, analysis, and facilitation of the SHIP Team to arrive at an update of the Healthy Illinois 2021 plan. With permission from IDPH and in addition to IDPH funding, the P3RC leveraged its CDC Prevention Research Center cooperative agreement (U48DP006392) to support this process and will use data gathered to guide future capacity building initiatives to address policy, systems and environmental change initiatives.

#### **Appointment of SHIP Team**

In August 2020, IDPH Director, Dr. Ngozi Ezike, appointed a multi-sectoral State Health Improvement Planning Team (SHIP Team) of the state public health system (SPHS) and community partners to update Healthy Illinois 2021 and develop an 18-month implementation plan. The SHIP Team members were tasked with participating in at least three virtual SHIP Team meetings between October and November 2020 and reviewing three pre-recorded presentations prior to each meeting, which included an introductory webinar and two data presentations. The Planning Team worked with the SHIP Team to develop an update to the Healthy Illinois 2021 SHA and SHIP to inform programmatic needs, meet the requirements of the law to the best degree possible – given the limited bandwidth due to the COVID-19 pandemic – and guide SHIP priorities for the next eighteen months prior to the completion of a more comprehensive, equity driven SHA/SHIP between January 1, 2021 – June 30, 2022.

#### Landscape Scan, Data Collection and Analysis

#### State Health Assessment Update

To inform the update to the Healthy Illinois 2021, a high-level health needs assessment was conducted beginning in August 2020. For this assessment, state-level data and reports were obtained from IDPH related to the current SHIP 2021 priorities specifically, chronic diseases, behavioral health, including substance misuse and mental health, and maternal and child health. High level summary status data and reports of other urgent, emerging or relevant health outcomes and risk factors were also gathered from relevant IDPH divisions and programs, including population data; leading causes of death and premature mortality; communicable diseases, such as sexually transmitted infections and foodborne outbreaks; environmental health indicators, specifically childhood lead poisoning; disease and risk factor prevalence data from the Behavioral Risk Factor Surveillance System (BRFSS); measures related to equity and social determinants including income, health care access and educational attainment; and injury data including homicide, suicide and firearm related injury.

Since the COVID-19 pandemic was a central focus of much of public health activity in Illinois for 2020, IDPH provided data on status of the pandemic. Publicly available data from the US Census Bureau, American Community Survey, and other federal and Illinois departments (i.e. U.S. Bureau of Labor Statistics) were also queried for the assessment. This effort was led by staff and faculty from the P3RC.

Due to the aim of updating relevant data including looking at new forces of change and the short timeline for the assessment, the analysis included a limited high-level overview of the Illinois health status. Data were not available or could not be prepared in specific detail for county or regional levels in the state. However, this data will be updated, including a full update of the Illinois Data Book, in 2021 during the comprehensive SHA process.

For the analysis, data were compiled into a presentation format and documented the current status of each of the SHIP 2021 Priorities: chronic disease, behavioral and mental health, and maternal and child health. Other selected health status measures and indicators were presented in several domains (see figure 2) and include: **context** - demographics and social determinants of health; **health status** - mortality and morbidity; **health behaviors** – behavioral factors; **health care** – access, utilization, and clinical indicators; and **emerging issues** - equity, climate change and COVID-19.

#### Figure 3. Health Domains Health Domains

#### Context

- Demographics
- Social Determinants of Health

#### Health Status

- Mortality
- 2016-2021 SHIP Priorities
  - Chronic Conditions
  - Behavioral Health
  - Maternal and Child Health
- Communicable Disease
- Injury and Violence

#### Health Behaviors

#### Health Care

- Access and Utilization
- Clinical Indicators

#### **Emerging Issues**

- Equity
- Climate Change
- COVID-19

#### Review of Chronic Conditions, Behavioral Health and Maternal and Child Health

In addition, the IDPH team reviewed subsequent primary and secondary data collected on the Healthy Illinois 2021 objective measures to evaluate progress made in achieving the objectives and advance understanding on how prevalent health issues affect different socio-demographic groups of the population. The data used for this analysis were collected through the Behavioral Risk Factors Surveillance System (BRFSS), Pregnancy Risk Assessment Monitoring System (PRAMS), Vital Records (birth and death) data, and survey sent to health program managers within and outside of IDPH working on the same goals and objectives. The analysis computed changes in current and baseline values of the objective measures and compared the results to the target values to identify objectives and goals that are being met and not being met. A qualitative analysis of programs' activities and interventions implemented to address each objective help identify programs' strengths and areas of opportunity. The analysis highlighted the emerging issues associated with opioid overdose, cigarette smoking, and COVID-19, such as increasing exposure of pregnant women to opioid drugs, e-cigarette, vaping, and excess deaths due to COVID-19 among people who have comorbidities. The results were shared with the State Board of Health (SBOH) for awareness, comments, and inputs.

In addition to the analysis and presentation of health status data, where applicable, relevant response data from the two surveys described in more detail below: the LHD stakeholder survey and the IDPH Staff and SBOH survey were examined and presented. Questions about the perceptions of current and emerging health priorities and the status of the COVID-19 pandemic response were presented to assist in determining health and strategic priorities for the updated SHIP.

#### LHD IPLAN Priority and Intervention Strategy Analysis

P3RC students, faculty, and staff at the UIC School of Public Health systematically reviewed 92 IPLANs to identify areas of alignment, inform the update to the SHA/SHIP, and inform capacity building initiatives for LHDs. Every 5 years, IDPH requires LHDs to complete a community health assessment and improvement plan, or IPLAN, as part of a re-certification process to ensure that LHDs are adequately addressing the core public health functions. As part of the IPLAN process, LHDs must convene a community health committee composed of diverse stakeholders to identify at least three health priorities within their county or region and a community health plan focusing on three priority health problems.<sup>2,3</sup> The IPLANs were assessed using a coding guide and results of this scan help to understand the selected priorities and types of strategies used by LHDs, including alignment of statewide priorities, unique geographic differences in priorities, use of policy, systems, environmental change (PSE) approaches, and alignment in approaches and interventions across LHDs.

To develop a strategy coding guide, the team reviewed a sample of IPLAN strategies and developed initial categories. With guidance from SPH faculty, these categories were bolstered and refined by two evidence-based frameworks: Frieden's Health Impact Pyramid and the socioecological model.<sup>4,5</sup> The base of Frieden's Health Impact Pyramid includes interventions that have the highest population impact and require the least individual effort to create a change in health. Interventions toward the top of the pyramid require greater individual effort and have the least population impact. The socioecological model was used to capture the sphere of influence of a given intervention, where the intrapersonal level has the smallest sphere of influence, and the policy level has the largest sphere of influence (see Figures 4 and 5).

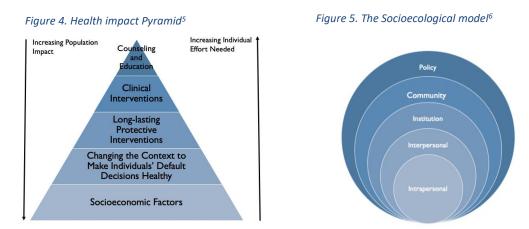
<sup>&</sup>lt;sup>2</sup> Illinois Department of Public Health (nd). A Workbook for Local Public Health Department Administrators, IPLAN Leaders and Community Participants. http://app.idph.state.il.us/pdfs/IPLAN workbook v2.0.pdf

<sup>&</sup>lt;sup>3</sup> Illinois Department of Public Health (nd). Illinois Project of Local Assessment of Needs.

http://app.idph.state.il.us/Resources/IPLANProcess.asp?menu=3

<sup>&</sup>lt;sup>4</sup> Frieden, T. R. (2010). A framework for public health action: the health impact pyramid. *American journal of public health*, *100*(4), 590-595.

<sup>&</sup>lt;sup>5</sup> McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. Health education quarterly, 15(4), 351-377.



The team collected other attributes to capture the range of activities being implemented by LHDs. Additional attributes outside of the two frameworks were defined through literature and expert review. The additional attributes include enabling and increasing access to health services, direct non-clinical services and resources, collaboration and partnership, professional capacity building and training, and advocacy.

After finalizing the coding guide, 86.4% coder reliability was achieved after multiple rounds of practicecoding. To measure coder reliability, the same 2 IPLANs were coded and all the strategies were compared. Several quality checks were conducted once coding was completed. The coding team met with SPH faculty for guidance and clarification and addressed discrepancies to ensure that coding was systematically applied across the IPLANs. Two of the 92 IPLANs had to be excluded from evaluation due to a lack of discernable strategies.

#### **Surveys**

The Planning Team conducted two surveys to gather insights from IDPH staff and the SBOH as well as LHD staff throughout Illinois to inform the SHA/SHIP update as well as the IDPH Strategic Plan. Both surveys were codeveloped by P3RC and IPHI. The surveys were conducted using online survey platforms. The LHD survey was administered through SurveyGizmo<sup>®</sup> and the IDPH staff and SBOH survey was administered through SurveyMonkey<sup>®</sup> due to technical difficulties with SurveyGizmo<sup>®</sup> within IDPH. In September 2020, both surveys were disseminated via email to the target audiences.

For the SHA/SHIP update, the purpose of the stakeholder survey was to inform priorities for the next 18 months, inform the approach to address the priorities and to understand the public health system's leadership and capacity needs. This survey was disseminated to the most up-to-date contact list for LHD administrators through an email encouraging administrators to share the survey with other LHD staff. Perceptions of the Healthy Illinois 2021 SHIP priorities and the tension with new/emerging priorities including COVID-19 and racism were explored as well as perceptions about the capacity and capability of the Illinois public health system.

Specifically, the LHD survey collected perspectives to:

- understand the current and future priorities, assets, challenges and opportunities for the Illinois public health system;
- assess alignment and urgency of past SHIP priorities and additional priorities compared to local health departments (both surveys);
- understand the local public health system capacity and needs to address these priorities and assess opportunities for improvement in the local public health system;
- understand LHD perspectives on IDPH strengths, weaknesses, opportunities and threats;
- assess COVID-19 response actions to date and gather perspectives on ways to improve the response going forward; and
- assess anti-racism priorities and status.

Survey data collection opened on Wednesday, September 2, 2020 and closed on Tuesday, September 22, 2020, allowing three weeks for completion. Weekly reminders were sent from a variety of sources, including IPHI, UIC P3RC, and IDPH. The survey received 75 respondents from Illinois local public health department staff of all levels. To maintain anonymity and encourage candid feedback, respondents were not asked to provide a name, geographical location, or the name of the health department.

The following respondent data were collected:

- Over 70% of respondents have worked in public health for over 10 years (31.9% 10-19 years, 38.3% 20+ years)
- Almost 73% of respondents identified as senior executives or leadership with only 2.1% identified as support staff
- Almost 90% of respondents identified as White, 6.3% preferred not to answer, and 2.1% identified as African American/Black.
- Over half of the respondents identified their age range as between 45 (45-54, 20.8%) and 64 (55-64, 45.8%) with only 8.3% identified as 25 34.

The staff/SBOH survey was conducted to inform both the IDPH Strategic Planning process as well as the update to the Healthy Illinois 2021 SHA/SHIP. The staff/SBOH survey was disseminated to IDPH staff (including contractual and assignees) the members of the Illinois SBOH and representatives of the Governor's office. The survey sought to understand IDPH's strengths, weaknesses, opportunities, and threats and the need to update the Department's mission, vision and values as part of the Department's strategic planning process which was being conducted simultaneous to the SHA/SHIP update.

Specifically, the survey collected staff and governing body perspectives to:

- inform the IDPH mission, vision and values/guiding principles and strategic planning priorities;
- identify the Department's internal strengths and weaknesses including gaps and overall areas for improvement and to identify external opportunities and threats;
- assess how the Department addresses social and structural determinants of health, and the response and priorities on current issues (anti-racism, COVID-19);
- assess functionality and needs related to key infrastructure issues, including workforce development and staffing, collaboration and partnerships, information systems and data, communication, and financial sustainability.

Survey data collection opened on Wednesday, September 2, 2020 and closed on Friday, September 25, 2020, allowing 24 days for completion. Weekly reminders were sent from IPHI and IDPH. The survey results included data from 177 respondents. As with the LHD stakeholder survey, anonymity was sought to maintain respondents' confidentiality. Respondents were not asked to provide their name, office location, or specific program area.

The following respondent data were collected:

- IDPH staff, contractual or assignee, made up almost 92% of respondents with 4.5% identified as SBOH members.
- Support staff made up the largest percentage of respondents (31.9%) followed by program or direct service staff (31.1%)
- Over half of the respondents identified as having worked in IDPH or state government for over 10 years (10-19 years 22.4% and 20+ years 23.1%). Another quarter of respondents identified as having worked for IDPH or in state government for less than 3 years.
- A majority of the respondents identified their age range as over 45 (45-54 25.4% or 55-64 32.1%).
- Almost 53% of respondents identified as White, followed by 19.9% as African American/Black, 8.1% Hispanic or Latino(a), and 1.5% Native/Indigenous American. 11.8% preferred not to answer.

The two surveys were originally created and disseminated in the SurveyGizmo® platform. Due to issues with several IDPH staff not being able to access the staff /SBOH survey developed in SurveyGizmo®, about a dozen surveys data completed in this platform were not analyzed and the survey was re-administered via the SurveyMonkey® platform. These platforms performed some basic analysis on both quantitative and qualitative data; additional analysis for graphical displays of data was conducted by the Partnership staff. Cross tabulation data analysis based on respondent characteristics was not conducted as limited respondent information was collected to maintain anonymity of the respondent. Qualitative survey data was analyzed by coding the narrative responses according to themes and counting the number of time themes were mentioned. Themes and summary statements were created for each code to rank them by priority based on counts. The comments identified by the same code were put into one group and analyzed to write a summative thematic statement about all the comments. Each code was counted to determine frequency and priority.

#### Focus Groups

The P3RC and IPHI co-developed a facilitation guide designed to seek input from public health system and community stakeholders and partners throughout the state who are working on Healthy Illinois 2021 priorities and emerging priorities including COVID19 and anti-racism, and social justice and equity. Five focus groups with various stakeholders from the public health system were held as follows:

- 1. Emergency Managers/Illinois Emergency Management Agency members
- 2. Resources hospitals/coalitions and Illinois Health and Hospital Association representatives

- 3. Illinois local health department leadership
- 4. A subset of the COVID-19 Equity Committee
- 5. Coalition representatives from the Healthy Illinois 2021 priority areas: maternal and child health, chronic disease, and mental health

Focus group participants were identified through outreach by IDPH staff and partners. The 90-minute focus group sessions took place September – October 2020 to inform priorities for the next 18 months, inform the approach to address the priorities, and inform leadership capacity building in Illinois to help address needs and gaps. Focus group participants were asked to discuss the current and future state of the public health system, the role of the system in addressing structural racism, and the COVID-19 response thus far and needs for the future COVID-19 response.

Qualitative data from the focus groups were analyzed from the notes and recordings of the focus group sessions. Comments were first coded and then themes were identified from each of the focus groups. Themes were further specified based on priority and frequency of comment. A secondary coding took place to identify final themes throughout the groups. Participants also provided non-verbal comments through the chat box that were collected and integrated into this process.

#### **3 SHIP Team Meetings**

Due to COVID-19 pandemic restrictions, the SHIP Team meetings were limited to three virtual meetings with pre-meeting work to review an introduction to the SHA/SHIP update process and a summary of all updated primary and secondary SHA data compiled and analyzed. Prior to each meeting, a recorded webinar was disseminated to SHIP Team members to review prior to the meeting, allowing the Team to maximize the time in meetings for discussion. The three webinars focused on the following:

- 1. an introduction to the SHA/SHIP update process with a welcome and process overview IDPH Health Director, Dr. Ezike;
- 2. health status data, an analysis of LHD PLAN priorities, and stakeholder perceptions on the Healthy Illinois 2021 priorities and emerging priorities based on survey data; and
- 3. an analysis of the LHD IPLAN strategies data and data from stakeholders on the public health system strengths, weaknesses, capacities, and capabilities based on survey and focus group data.

The three SHIP Team meetings were planned and coordinated in partnership with the Planning Team. Public agendas were posted prior to the meetings pursuant to the Open Meetings Act and time was designated at the end of each meeting for public comment. No public comments were received.

IDPH Assistant Director, Dr. Amaal Tokars provided welcome addresses and introductions for the Team meetings. Each meeting was designed to be highly interactive and built upon Team member reflections and findings based on their reactions to the pre-recorded data presentations. The three meetings were facilitated by IPHI and UIC P3RC staff to accomplish the meeting objectives as indicated in the table below.

Meeting	Objectives		
Friday, October 16 <sup>th</sup>	Discuss current population health status data		
10:30 AM – 12 PM	<ul> <li>Discuss perspectives from survey responses and focus group</li> </ul>		
	responses on Illinois priorities		
	• Discuss alignment of pop health status data with former Healthy		
	Illinois 2021 priorities and the current situations (e.g., equity,		
	racism, and COVID-19 response)		
	• Discuss short-term vision for what we can accomplish together in		
	the next 18 months		
Friday, October 30 <sup>th</sup>	• Share and discuss summaries of data from meeting 1, the IPLAN		
10:30 AM – 12 PM	strategies data analysis and the LHD survey and focus group		
	feedback on the public health system		
	<ul> <li>Discuss how the system strengths can be amplified, how the</li> </ul>		
	challenges can be addressed and what the system can do together		
	to improve		
	<ul> <li>Use public health and health equity frameworks to identify</li> </ul>		
	potential priorities for the 18-month plan		
Friday, November 6 <sup>th</sup>	<ul> <li>Review priorities based on the updated SHIP data.</li> </ul>		
10:30 AM – 12 PM	Discuss and select the best strategies to address infrastructure		
	challenges and apply the ASTHO health equity framework		
	• Discuss the best structure to support implementation for the 18-		
	month plan		

#### **Update Findings**

#### **Population and Health Status Indicators**

The review of the health status indicators available for the assessment showed that for the 2021 SHIP priorities:

#### **Chronic Diseases**

- Chronic diseases such as cardiovascular disease, cerebrovascular disease (stroke), cancers, and diabetes continue to be leading causes of both mortality and premature mortality (under 65 years of age).
- Excess deaths among residents who have chronic diseases in year 2020 are associated with COVID-19.
- In 2018, half of all Illinois adults have at least one chronic condition.
- Obesity prevalence has increased among adult by 7.8%, from 29.5% in 2014 to 31.8% in 2018, and racial/ethnic disparities were noted.
- Less than one-third of adults meet exercise guidelines; 2.5% increase, from 24.0% in 2014 to 24.6% in 2018 in the percentage of Illinois adults reporting no physical activity in the last 30 days

• While cigarette smoking decreased by 13.2% from 16.7% in 2014 to 15.5% in 2018 and to 14.5% in 2019, a relatively higher percentage (23.5%) of Illinoisans have tried e-cigarette, of which 6% are current smokers.

#### Maternal and Child Health

- Illinois fell short of the Healthy People 2020 goal for the proportion of women receiving adequate prenatal care; Black, Hispanic, and teen women were less likely to receive care.
- 5.9% increase in preterm births, from 10.1% in 2014 to 10.7% in 2018; Black infants were more than twice as likely to be born at low birthweight (less than 2500g) than White infants.
- 1.2% decrease in the rate of all infant deaths, from 6.59 per 1,000 in 2014 to 6.51 per 1,000 in 2018, with Black infant death rates nearly 3 times higher than White infant rates.
- Maternal mortality was 6 times higher with non-Hispanic Black women (2015-2016); women over 40 were 3 times higher than younger women (2015-2016). Slightly more than 1 in 20 children aged 5 years and younger had elevated blood lead levels in 2018.

#### Behavioral /Mental Health and Substance Misuse

- Suicide was the 11<sup>th</sup> leading cause of death in 2018; rates increased slightly since 2010 and White rates were more than double other race/ethnicity groups (2016-2018).
- Number of young adults (aged 18 to 24 years) who report experiencing poor mental health for more than one week per month increased by 16.5%, from 20.6% in 2014 to 24.0% in 2018.
- In 2018, 18% of residents report ever being diagnosed with a depressive disorder.
- Nearly one out of 6 (15.4%) Illinoisans reported experiencing poor mental health more than one week in each month (2016-2018).
- Mental health-related conditions were substantial contributor of hospitalizations and emergency department visits.
- Synthetic opioids related mortality was a major cause of death and showed rising rates. The increase began before the onset of the COVID-19 pandemic and is most likely associated with synthetic opioids such as fentanyl in the drug supply.
- Opioid mortality showed high rates across all age groups between 35 and 64 years.
  - 3.7% decrease from 2017 to 2019
  - Increase in 2020 due to synthetic opioid such as fentanyl in the drug supply
  - Additional data collected through PRAMS in 2018 show that pregnant women are being affected by the opioid crisis:
    - One out of 10 (9.7%) recent mothers reported using marijuana or hash in the three months before or during their most recent pregnancy. This rate is higher among mother aged 20-24 years (17.0%), compared to those aged 25-29 years (7.9%), 30-34 years (7.7%), and 35 years or over (6.3%). Those covered by Medicaid insurance were more likely to use marijuana or hash three months before or during pregnancy (17.0%), compared to those with private insurance (6.7%).
    - Seven out of 10 (71.0%) recent mothers reported using an over-the-counter pain reliever, such as Acetaminophen (64.8%), ibuprofen (15.9%), Aspirin (8.2%) and naproxen (Aleve<sup>®</sup> or Midol<sup>®</sup>) (2.6%).

- Nearly 1 out of 8 (11.9%) recent mothers reported taking medications or drugs (during pregnancy), such as medication for depression or anxiety, methadone, Adderall®, marijuana, heroin, amphetamines, or cocaine. Of drugs used during pregnancy, 5.9% of recent mothers used medications for depression (e.g., Prozac®, Zoloft®, Lexapro®, Paxil®, or Celexa®), 5.0% used marijuana or hash, and 2.7% used medications for anxiety (e.g., Valium®, Xanax®, Ativan®, Klonopin®, 'benzos').
- The rate of all drug poisoning deaths increased among women of reproductive age, reaching 101 percent increase between 2008 and 2017. As the rate of opioid use has increased among women of reproductive age, the rate of infants born with Neonatal Abstinence Syndrome (NAS) also has grown in Illinois.

A review of population and other social indicators revealed:

- By 2019 the population of Illinois declined slightly (1.2%) since the 2010 US Census; Hispanic (5%) (since 2013) and Asian (nearly 14%) populations showed increases during this period, as well.
- Illinois population remains concentrated in 6 northeastern counties with nearly 2/3 of Illinois residents as of 2019.
- The population of children declined by 7%, while those over 85 years increased by 19% between 2013 and 2019.
- Nearly 1 in 6 residents is foreign born and nearly one quarter speak another language at home between 2014 and 2018.
- Population diversity varied within the state with Cook County and Chicago being most diverse in 2019.
- Poverty rates declined with 11.5% living below the federal poverty level between 2013 and 2019; Hispanic rates were 2 times higher than White rates.
- In 2019, 1 in 6 children in Illinois live in poverty.
- Between 2014 and 2018, high school graduation rates in Illinois were 88.9%.
- Unemployment was low in 2019 at 4% but increased to 11.0% in mid-2020.
- Overall health insurance status rates have improved with only 8.6% lacking health insurance under 65 in 2019; nearly one-third of Hispanic adults lack health insurance.

Beyond the 2021 SHIP Health Priorities, other health status indicators showed:

- In 2017, Black and Hispanic life expectancy at birth was 14 and 12 years lower than the highest group.
- Similar trends in sexually transmitted infections were seen across Illinois with greatest increases seen in gonorrhea incidence rates between 2014 and 2018.
- New HIV infections and AIDS diagnoses showed declining rates (2014-2018).
- One-third of foodborne outbreaks in 2019 were part of multistate incidents.
- Health care, specifically primary care, capacity varies across Illinois counties (2016).

- Increases were seen in persons reporting having a primary care provider among all race/ethnicity groups between 2013 and 2018.
- Disparities in access to care were seen in substantially higher emergency department visit rates among Black residents for asthma and diabetes (2016-2018).

Related to equity indicators the following were noted:

- Inequities were seen by race/ethnicity in
  - Educational attainment with only 2/3 of Hispanics graduating high school (2014-2018).
  - In 2019, income with Black household earning 60% less than the highest group.
  - Between 2014 and 2018, employment with Black unemployment more than 3 times that of other groups.

Among emerging issues, the status of the COVID-19 pandemic response was examined. The data from this analysis showed:

- The age distribution of COVID-19 cases changed from older residents (aged 80 years and over) in early stages of the pandemic to younger residents (aged 20 to 29 years) in late summer 2020.
- Highest positivity rates were seen among the Hispanic population.
- Highest mortality rates were seen in persons aged 80 years and over and among Black residents.
- Mortality rates have declined during the year and disparities by race/ethnicity have narrowed.
- Survey respondents overall reported better than average perceptions of the public health systems response across characteristics.
- Despite generally good ratings overall, communication, preparedness, community engagement and access to services were identified as most frequent gaps or areas for improvement in system's response.

#### **IPLAN** Data

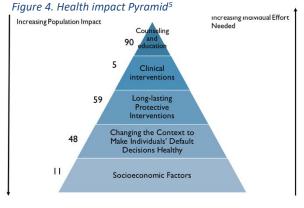
The priority scan included a review of 92 IPLANs representing all 102 Illinois counties. Fifteen counties were part of 4 cross-county collaborations resulting in 92 IPLANs. The structure of IPLANs is guided by section 600.400 of the Certified Local Health Department Code.<sup>4</sup> IPLANs ranged from 25 to 150 pages. Notably, all the IPLANs were created before the emergence of the COVID-19 pandemic.

IPLAN priorities were coded according to the health topic they addressed. The plans were also coded for the existence of strategies by 1) level on the Frieden Health Impact Pyramid, 2) sphere of influence on the Socioecological Model, and 3) presence of additional attributes.

The scan revealed that most IPLANS (84%, n =77) included chronic disease as a health priority (see Table 1). Mental health was listed as a priority in 52% (n=48) IPLANs, and Access to Care and Substance Abuse were each listed as priorities in 37% (n=34) IPLANs. Priorities to address the social determinants of health only appeared in only 13% (n=12) of IPLANs. All other priorities appeared in less than 10% or fewer of the IPLANs.

Table 1. Number of IPLANs with Specified Health Priorities (N=92)			
Healthy Priority Type	% (n)	Examples	
Chronic Disease	84% (n=77)	Cancer, Diabetes, Obesity	
Mental Health	52% (n=48)	Suicide, Depression, Anxiety	
Access to Care	37% (n=34)	Access to Dental Care, Primary Health	
		Care, Community Support (Access to	
		Care)	
Substance Abuse	37% (n=34)	Opioid/Heroin Deaths, Youth	
		Substance Abuse, Drug/Alcohol	
		Tobacco Use	
Other	14% (n=13)	Bullying, Asthma	
Social Determinants of Health	13% (n=12)	Income and Education, Food Insecurity,	
		Health Equity	
Injury/ Violence	10%(n=9)	Child Abuse, Unintentional Injuries	
Oral Health	9% (n=8)	Oral Health	
Maternal and Child Health	9% (n=8)	Prenatal Care, Infant Mortality,	
		Adolescent Health	
STIs/Sexual Health	8% (n=7)	Sexual Health Education	
Senior Health	4% (n=4)	Aging Population Needs, Dementia	
Environmental	4% (n=4)	Air quality, Environmental protection	
		services, Decreasing community	
		population potential exposure to Lyme	
		Disease	
Lifestyle	4% (n=4)	Poor Health Behaviors	

The Frieden Health Impact Pyramid was used to categorize proposed strategies by level of potential population impact and corresponding level of individual effort needed to make a change in health status. Two IPLANs were excluded from the strategy analysis because they had no discernible strategies. Findings indicate that 100% (n=90) of IPLANs included counseling and education interventions (see Table 2). Only 6% (n=5) of IPLANs included clinical interventions. 66% (n=59) IPLANs applied long-lasting interventions, 53% (n=48) of IPLANs included PSE interventions that changed the context to make individual's default decisions healthy, and 12% (n=11) of IPLANs included interventions to address socioeconomic factors.



The Health Impact Pyramid. Frieden, 2010

Additional categories were created within the counseling and education category to capture the nuance within the IPLANs. Most IPLANs (86%, n=77) had at least one health communication strategy, 77% (n=69) of IPLANs had at least one health education activity, and 73% (n=66) had at least one program. Finally, 40% (n=36) of IPLANs had at least one health education and counseling intervention.

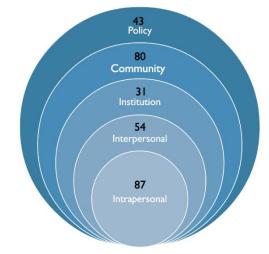
The "changing the context to make individuals' default decisions healthy" category was divided into subcategories of policy, systems, environmental change. The results showed that 34% (n=31) of IPLANs had at least one systems' change, 24% (n=22) had at least one policy change, and 21% (n=19) had at least one environmental change (see Table 2).

Tabl	Table 2. Number of IPLANs with Strategies Specified in the Health Impact Pyramid (N=90)			
Strat	tegy Туре	% (n)	Examples	
Heal	th Education/ Counseling	100% (n=90)		
	Health Communication	85% (n=77)	Brochures, resource guides to	
			community-wide, multi-media/ social	
			marketing campaigns	
	Health Education Activity	76% (n= 69)	Health fairs, workshops	
	Program	73% (n=66)	Chronic Disease Management	
			Programs, sexual health education	
			curriculum, and Coordinated Approach	
			to Child Health (CATCH)	
	Health Education/ Counseling	40% (n=36)	In-clinic counseling, support groups	
Ong	oing Clinical Interventions	6% (n=5)	Chronic disease treatment	
Long	-Lasting Protective Interventions	66% (n=59)	Cancer screenings and immunizations	
Char	nging the Context	53% (n=48)		
	Policy	24% (n=22)	Development of ordinances primarily	
			around smoking	
	Systems	34% (n=31)	Implementation of care coordination,	
			new screening protocols and tools	
	Environmental	21% (n=19)	Community gardens, enhancing biking	
			and walking infrastructure	
Soci	peconomic Factors	12% (n=11)	Housing quality and general strategies	
			to improve SDOH	

IPLAN strategies were also analyzed using the Socioecological Model to categorize their sphere of influence.

Within this model, 97% (n=87) of IPLANs included intrapersonal interventions; which often included individual health education (see Table 3). 60% (n=54) of IPLANs included interpersonal interventions, many of which targeted parents and providers. 34% (n=31) of IPLANs included institutional interventions; many of which planned to enhance workplace environments through systematic training of employees. Lastly, 89% (n=80) of IPLANs mentioned community level interventions, and 48% (n=43) had policy intervention-level strategies. Many of these policy interventions addressed Smoke-Free Illinois enforcement.





Socioecological Model

Table 3. Number of IPLANs with Strategies on the Socioecological Model and Examples (N=90)			
Level of Influence	% (n)	Examples	
Policy	48% (n=43)	Enforcement of current Smoke-Free policies	
Community	89% (n=80)	Community-wide communication campaigns	
		to enhancing community services	
Institution	34% (n=31)	Enhancement of workplace environments;	
		systematic training of employees and/or	
		leadership surrounding health issue or	
		protocol	
Interpersonal	60% (n=54)	Education of providers on resources for their	
		patients and parental education	
Intrapersonal	97% (n=87)	Health education activities	

As some important strategy attributes could not be captured within the Friend Health Impact Pyramid or Socioecological Model, IPLAN strategies were also analyzed for additional attributes, ranging from partnership to harm reduction. 96% (n=86) of IPLANs had at least one strategy pertaining to collaboration, coalition building, or partnerships (see Table 4). 73% (n=66) of IPLANs proposed strategies to enable and increase access to health services. Professional capacity building strategies were proposed in 52% (n=47) of IPLANs, and advocacy was mentioned at least once in 31% (n=28) of IPLANs. Similarly, 29% (n=26) had strategies related to feasibility, which included strategies that explored the possibility of a given intervention or approach. 27% (n=24) of IPLANs planned to provide tangible resources like food, toothbrushes, or condoms. Likewise, 27% (n=24) proposed funding and/or grant writing strategies. Only 10% (n=9) of IPLANs proposed robust, multi-level health education initiatives and 3% (n=3) proposed community capacity building strategies. Harm reduction strategies were used at least once in 8% (n=8) of IPLANs while compliance/ enforcement appeared in 18% (n=16) of IPLANs. Lastly, 32% (n=29) of IPLANs included at least one evidence-based strategy, 56% (n=50) had at least one unclear strategy, and 16% (n=14) had at least one strategy in the category "Other", as these strategies did not align with other strategy codes.

Table 4. Number of IPLANs with Specified Strategy Attributes and Examples (N=90)			
Strategy Type	% (n)	Example	
Collaboration, Partnerships,	96% (n=86)	Collaboration with local organizations to	
Coalitions		implement strategies or provide services	
Enabling Access to Health	73% (n=66)	Helping residents sign up for health	
Services		insurance; hiring practitioners to meet	
		community needs	
Professional Capacity Building	52% (n=47)	Provision of training for specific skills (cultural	
		competency, trauma, communication) for	
		health providers or school staff	
Advocacy	31% (n=28)	Engagement of community members,	
		legislators, to inform about health issues	
Feasibility	29% (n=26)	Planning or researching an intervention to	
		implement	
Direct Resources	27% (n=24)	Provision of heathy food, toothbrushes,	
		condoms	
Funding/ Grant Writing	27% (n=24)	Identification of funding sources for	
		addressing health need/ issue	
Health Education Initiative	10% (n=9)	Multi-level initiative that may include	
		marketing and environment change	
Community Capacity Building	3% (n=3)	Sustained training/ engaging community for	
		health issue	
Harm Reduction	9% (n=8)	Naloxone training and prescription drug take	
		back programs	
Compliance/ Enforcement	18% (n=16)	Enforcing smoking and drinking laws within	
		the county	
Evidence-Based Strategies	32% (n=29)	IPLAN strategies were clearly grounded in	
		literature or references were linked	
Unclear Strategies	56% (n=50)	IPLAN Strategies that lacked clarity and could	
		not be coded	
Other	16% (n=14)	Mentorship, internship opportunities and	
		other miscellaneous strategies that did not fit	
		into set categories	

Overall, few IPLANs proposed the multi-level, robust interventions necessary for addressing and improving health issues at a community level. Only 10% of (n=9) IPLANs proposed multi-level health education initiatives. In addition, 97% (n=87) of IPLANs contained strategies at the intrapersonal level on the socioecological model and 100% (n=90) of IPLANs had strategies pertaining to health education and

counseling. According to Frieden's Health Impact Pyramid, these interventions require more individuallevel effort and have less population impact than PSE or socioeconomic interventions. <sup>5</sup> This finding aligns with our assessment of the IPLAN priorities, which found that only 13% (n=12) IPLANs included priorities related to social determinants of health. Educational interventions are more likely to improve population health when coupled with policy and environmental supports in place (i.e., a health education initiative). <sup>6,7</sup>However, the findings revealed that although 53% (n=48) IPLANs included PSE strategies, most of these strategies were relatively limited in scope. For example, many systems change interventions were related to enhanced care coordination and referral systems rather than robust, multi-level, multi-sectoral approaches. Similarly, nearly 89% (n=80) of IPLANs proposed community-level interventions, but most of these were related to health communication and education, rather than to enhancement of community services or infrastructure.

In alignment with recommendations from Public Health 3.0, <sup>8</sup> these findings point to a need and opportunity to provide LHDs with capacity building or skill building supports to create more robust, wide-reaching, and sustainable interventions to improve community health.

This systematic scan provides a framework for categorizing local health department strategies. Additionally, findings may inform public health practitioners of the gaps, challenges, and opportunities for LHDs.

#### **Healthy Illinois 2021 SHIP Priorities**

Data were gathered to assess the alignment and urgency of past SHIP priorities and gain perceptions on the current state of the Healthy Illinois 2021 priorities through the LHD Stakeholder survey and the IDPH Staff/SBOH survey. Over half of the survey respondents (50.6% staff/SBOH and 56.9% LHD) identified mental and behavioral health and substance misuse as very urgent priorities to address. Almost half of the survey respondents (47.1% LHD) also noted chronic disease as an urgent or very urgent priority to address. Focus groups frequently described the importance of addressing mental and behavioral health as well as chronic disease. Comparably, maternal and child health ranked lower in urgency and was not as frequently discussed in focus groups.

Across each current priority, access to care was described as most urgent or needed at this time. The impact of COVID-19 on behavioral and mental health and chronic disease was also noted. Social and structural determinants of health were consistently rated as urgent across all domains; however, this urgency was not consistently noted in IPLAN priorities. LHDs rated the public health system as having

<sup>&</sup>lt;sup>6</sup> Sallis, J. F., Owen, N., & Fisher, E. (2015). Ecological models of health behavior. Health behavior: Theory, research, and practice, 5(43-64).

<sup>&</sup>lt;sup>7</sup> Mikkelsen, B. E., Novotny, R., & Gittelsohn, J. (2016). Multi-level, multi-component approaches to communitybased interventions for healthy living—a three case comparison. International journal of environmental research and public health, 13(10), 1023.

<sup>&</sup>lt;sup>8</sup> DeSalvo, K. B., Wang, Y. C., Harris, A., Auerbach, J., Koo, D., & O'Carroll, P. (2017). Public Health 3.0: A Call to Action for Public Health to Meet the Challenges of the 21st Century. Preventing chronic disease, 14, E78. https://doi.org/10.5888/pcd14.170017

minimal capacity for Addressing Social and Structural Determinants of Health (39%), Integrating and Emphasizing Anti-Racism and Equity (30%), and Linking People to and Assuring Access to Personal Health (30%). In addition, 13% of LHD respondents indicated that the public health system had minimal capability for Integrating and Emphasizing Anti-Racism and Equity.

#### **Perception of New and Emerging Priorities**

To better assess alignment and urgency of the past SHIP priorities, survey respondents and focus group participants were asked about their perception of new and emerging priorities that should be addressed by the state public health system. Participants identified new priorities and reinforces most of the priorities from Healthy Illinois 2021. Participants identified health equity and the six top priority issues to focus on for the next 18 months as: mental and behavioral health, access to care, structural racism, public health system capacity and infrastructure, health equity, chronic disease, and COVID-19. Overall, all past SHIP priority issues were still noted as most important to address; maternal and child health remained a priority based on the data showing disparities but did not surface throughout the surveys and focus groups as a top priority. Both focus group and survey participants described increased disparities for mental and behavioral health and chronic disease. They also noted a greater need to address issues on a system level and prioritize health equity.

#### Structural Racism

Survey respondents and focus group participants were also asked about their perceptions on the readiness and capacity of IDPH and the public health system related to working towards anti-racism, equity, and justice. Addressing racism, equity and justice was frequently described throughout the focus groups and survey data as significant issues for the state. Survey respondents and focus group participants noted that IDPH has been doing some good work with providing community outreach and engagement and formalizing plans to address equity.

Focus group participants also frequently noted limited funding to address these issues and allocate resources to marginalized groups of color, a lack of diverse staff and those with lived experiences, and limited representation of these groups brought/invited to the table.

Focus group and survey participants alike believe the system should provide opportunities for engagement, work towards dismantling racist systems, focus on individual responsibility, and promote diverse recruitment within the public health profession to achieve equity and eliminate racism.

#### COVID-19

Many members of the public health system have had to focus their resources and energy on the COVID-19 response; this provided a timely assessment for what was going well and opportunities for improvement. Focus group participants and survey respondents assessed their continued needs, partnership roles, and the quality and effectiveness of the IDPH response about the COVID-19 response, as well as asked participants to assess the importance of addressing previous SHIP priorities while balancing the COVID-19 response

**Health Priorities**: Chronic disease was identified as a main priority prior to the COVID-19 pandemic whereas behavioral health was identified as an even bigger priority now. Focus group participants also frequently noted mental and behavioral health as a priority, specifically with the impacts of COVID fatigue and social isolation. Access to Care was noted as urgent and important by survey respondents and focus groups alike.

**Health Inequities**: Increased disparities in access to care for marginalized and vulnerable populations (i.e., undocumented, people experiencing homelessness, people with disabilities, people of color, etc.) were shown with linkages to crisis response lines, telehealth, healthcare coverage, and availability of quality care. The COVID-19 pandemic has shown disparities in rates of positivity and mortality, with Hispanic and Black residents showing the highest rates. Forty-three percent of LHD survey respondents noted equity, anti-racism, and justice as a 3 out of 5 for how well it has been conducted by the system during COVID-19.

**Infrastructure**: Despite generally good ratings overall, communication, preparedness, data, and assessment, setting realistic goals, funding, community engagement, and access to services were identified as most frequent gaps or areas for improvement in the public health system's response. Coordination, communication, and access to services were most frequently highlighted by survey respondents as public health system gaps and challenges in most urgent need for improvement. Moving forward, survey and focus groups participants also noted the need to begin to balance COVID-19 response and preparedness with normal operations.

#### Current and Future State of the Public Health System

To better assess opportunities for improvement in the state public health system, data was collected on the current and future state of the system through focus groups, the LHD Stakeholder survey, the Staff/SBOH survey and the IPLAN strategies analysis. An analysis of the data and information showed congruency across the results.

The stakeholder survey asked specific questions related to what extent they believe the public health system in Illinois demonstrates public health capability and capacity with the 10 Essential Public Health Services as well as addressing social and structural determinants of health and integrating anti-racism and health equity. Participants noted overall that improving partnerships, coordination, and collaboration; data accessibility and use to drive planning and decisions making; workforce availability and workforce development; and sustained funding was needed to help build the public health system.

#### Focus Group Data on the Current and Future State of the Public Health System

Current State:

- Participants most frequently described examples of **collaboration**, **immunization efforts**, and **program and policy development** as examples of what has been done well in the past and currently as a public health system.
- Access to care, partnership engagement, SPHS communication, data limitations, funding and resource limitations, and workforce capacity were identified as areas most needed for improvement in the public health system.

Future State:

- Data revealed that there is a need for better communication and collaboration, improved decision making, increased funding, and overall workforce development to balance preparedness and address other community needs.
- Participants also identified access to care with a link to addressing needs related to social determinants of health, addressing and focusing on community care, addressing growing mental health needs and improving the public health system's collaborative planning and evaluation as priority goals over the next 18 months.
  - To work together toward these goals, participants noted the need for **data improvements**, **funding**, and **a focus on prevention**.
- Access to care, workforce development, and improved Medicaid application processes were most frequently cited as needed changes and improvements in the system.
- Participants noted specific needs to work toward these improvements through **data and assessment**, **setting realistic goals**, and **funding for sustainability of programs**.

#### LHD Survey Data on the Current and Future Public Health System

LHDs consistently reported the public health system in Illinois (IDPH plus partners) demonstrate public health **capability** (skills, knowledge, expertise) much greater than capacity (staff, time, funding). Overall, participants noted capability and capacity for assessment and education and less so implementation of activities:

- Diagnose and Investigate Health Problem
- Prepare and Respond to Health Threats in the Community
- Inform, Educate and Empower Communities about Health

#### Public Health System Capability:

• Two services scored lowest with regards to capability. 22% of respondents rated capability with Enforcing Laws and Regulations as minimal to no activity followed by 13% rating capability to Integrate and Emphasize Anti-Racism and Equity as 13% minimal.

- LHD respondents reported highest public health system capability with the following services:
  - Diagnose and Investigate Health Problems 67% optimal or significant
  - $\circ$  Prepare and Respond to Health Threats in the Community 59% optimal or significant
  - Monitor Health Status, Collect and Produce Relevant Data 57% optimal or significant
  - o Inform, Educate and Empower Communities about Health 51% optimal or significant
- While the essential service of Inform, Educate and Empower Communities about Health was rated 51% optimal or significant for capability, most IPLAN data also suggested activities related to the "inform and educate" service was high (e.g., communication and short-term education activities).

#### Public Health System Capacity:

- Overall, participants rated the capacity (staff, time, funding) of the public health system much lower than the capability of the public health system which helps to better understand the needs of the system.
- LHDs rated the **lowest capacity** (staff, time, funding) in the following areas.:
  - o Enforce Laws and Regulations 46% minimal to no capacity
  - o Addressing Social and Structural Determinants of Health 39% minimal capacity
  - Assure Development and Maintenance of a Competent Workforce 34% minimal to no capacity
  - o Integrate and Emphasize Anti-racism and Equity 32% minimal to no capacity
  - Link People to and Assure Access to Personal Health 30% minimal capacity
  - Explore and Research for Innovation and Insights to Address Public Health Problems -30% minimal to no capacity
  - Evaluate Effectiveness, Accessibility, and Quality of Services 29% minimal to no capacity
- LHDs rated the **highest capacity** in the following areas:
  - Diagnose and Investigate Health Problems 41% optimal to significant
  - Prepare and Respond to Health Threats 34% optimal to significant
  - o Inform, Education and Empower Communities about Health 32% optimal to significant
- The IPLAN data suggested empowering communities and building community capacity activities were low; whereas few IPLANs mentioned robust multi-sectoral work or policy and systems change beyond referral systems

#### Strengths, Weaknesses, and Areas for Improvement of the System

LHD survey respondents were asked to identify the strengths and weaknesses of the current public health system as well as possible ideas for improvement. Participants reported the following:

- Strengths:
  - **Communication** Respondents described the need to continue regular communication with LHDs, hold press conference and continued communication on sharing of data.
  - Education Respondents cited the need for continued public education and outreach to communities

- Partnerships Respondents described a need for continued collaboration and building of partnerships.
- Weaknesses:
  - Priorities Respondents cited a need to re-center the focus on at-risk populations while also reconsidering the planning and funding approach to have greater success at implementation.
- Ideas for Improvement:
  - **Community-Informed** Respondents cited a need to involve community members and organizations throughout the planning, implementation, and data collection stages.
  - Collaboration Respondents cited a need to involve health insurers and other levels of partnerships to see more long-term and sustainable change.
  - Funding Respondents cited a need for more funding to direct resources to the lower half of the state.

Based on this data, the SHIP Team determined there is a strong need to focus on improving the public health infrastructure over the next 18 months. Participants defined several strengths to amplify while addressing identified infrastructure challenges. Through discussion on leveraging the strengths to address challenges, the SHIP Team identified possible strategies to address the challenges (Figure 5). The SHIP Team reiterated that the Healthy Illinois 2021 priorities (behavioral health, chronic disease, and maternal and child health) are still important to work on along with emerging issues of COVID-19 and structural racism. However, the Team collectively recommended that investing in the infrastructure of the public health system by addressing the key challenges that surfaced in this update is vital to the overall improvement of public health in Illinois See figure 6 for a visual display of the strengths to amplify, challenges to address and the possible future state if we adequate address our challenges.

#### Figure 6: Public Health System Strengths, Challenges and Possibilities

2020 Public Health System Data and Possibilities

#### **Amplify Strengths**

- to improve data use, provision, and sharing
- the capability of the workforce
- investigating and diagnosing health
- issues
- coordination and collaboration

Address These Infrastructure Challenges

- Resource and funding limitations, including an adequate public health workforce
- Coordination/collaboration for Effective and Seamless Implementation
- IPLAN Data and Implementation Capacity
- Addressing systemic issues related to policy, preparedness, and prevention
- Capacity and capability to address social determinants of health, structural racism, and health disparities
- Equitable investment in rural health and the rest of the state outside of Chicago metro

#### Achieve These Possibilities

- Improved public health system coordination and collaboration to achieve shared goals
- Increased data collection and use of actionable data
- Increased prevention
- Improved distribution, awareness, accessibility to resources and funding
   Increased capacity of the public health workforce to address social and structural determinants of health including racism, advance health equity and social justice.
- Focus on systemic issues with bidirectional alignment of implementation between local communities and the state.

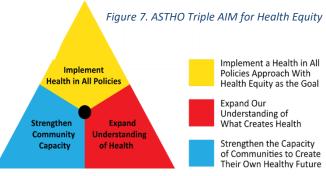
#### **Priorities**

#### Framework to Inform Prioritization

To support the SHIP Team's selection of priorities, the Team was presented with three frameworks: the ASTHO Triple AIM for Health Equity, the CDC Health Impact Pyramid, and the 3 "Buckets" of Prevention. From those frameworks, the SHIP Team utilized the ASTHO Triple AIM for Health Equity framework due to the focus on health equity and systems change. This model was used to support the prioritization process as well as the recommendation of strategies to address the priorities for improving the public health system infrastructure over the next 18 months.

#### **ASTHO Triple AIM for Health Equity**

Developed in partnership with the Association of State and Territorial Health Officials (ASTHO) and the Minnesota Department of Health (MDH),<sup>9</sup> the Triple Aim for Health Equity<sup>10</sup> is a multi-pronged approach to mobilize people, narrative, and resources to advance health equity.<sup>11</sup> These practices are based on a theory of change that recognizes the need to build



collective capacity to advance health equity. As shown in the figure below, the Triple Aim consists of (1) implementing a health in all policies approach with health equity as the goal, (2) expanding our understanding of what creates health, and (3) strengthening the capacity of communities to create their own healthy future.

This framework recognizes that advancing health equity requires a "systems changing" approach. This framework has a commitment to a set of practices that can help change a pattern in a system and requires strategies that disseminate and amplify best practices.

#### Implement a Health in All Policies (HiAP) Approach with Health Equity as the Goal

This piece of the model takes a broader view of what creates health to better understand how policies related to transportation, housing, education, public safety or environmental protection can affect health outcomes. It begins to address these factors by taking a "health in all policies" (HiAP) approach that encourages working across sectors to implement policies that broadly affect health in a variety of ways.

<sup>&</sup>lt;sup>9</sup> Minnesota Department of Health. (2019). <u>https://healthequityguide.org/case-studies/minnesota-changes-the-narrative-around-health-equity/</u>

<sup>&</sup>lt;sup>10</sup> Elhinger. (2016). We need a Triple Aim for Health Equity. https://www.astho.org/Health-Equity/2016-Challenge/Ehlinger-Commentary-Article/

<sup>&</sup>lt;sup>11</sup> Health Equity and Social Determinants of Health. ASTHO. https://www.astho.org/Programs/Health-Equity/

#### Expand Our Understanding of What Creates Health

The next component of the model is grounded in the belief that state health agencies serve a critical role in promoting public health and protecting the health of the people by providing access to healthcare services and applying the core public health functions to public health programs and systems (assessment, assurance and policy development). Further, state health agencies are leaders in implementing programs and policies that address health disparities, populations with the greatest inequities, and rural populations. The model is intended to empower state public health systems to think about the impact social determinants have in health outcomes, and more importantly, the role state, local, and national policies play in shaping and addressing those determinants. By expanding our understanding of what creates health, we can begin to develop and implement innovative policies that address key determinants of health inequities.

#### Strengthen the Capacity of Communities to Create Their Own Healthy Future

This piece focuses on strong public health leadership at the state level that can empower and support communities to get involved in creating policies and systems that improve conditions for their residents. State health agencies have a unique opportunity to chart a new course as public health transitions from focusing solely on preventing disease to understanding the whole person and the impact culture, society, and the environment have on a person's health journey. The component is intended to inspire state health agencies to build strong bridges with local and community organizations who support communities in strengthening their capacity to create their own health future.

# Update of Healthy Illinois 2021 Plan Priorities: Improving Public Health Infrastructure to Address Health Equity

Overall, chronic disease, mental and behavioral health including substance use disorder, maternal and child health disparities, social determinants of health, and access to care continue to be significant public health priorities for Illinois. Based on the data presented for the SHA update, the SHIP Team identified the need to continue to focus on these priorities while also focusing on increased disparities related to mental and behavioral health and chronic disease as well as a need to prioritize health equity including addressing racism and COVID-19. Further, the SHIP Team determined that it was essential for Illinois to focus on improving key public health infrastructure issues over the next 18 months.

Specifically, COVID-19 illuminated the need to greater bolster the public health infrastructure to address racial and ethnic inequities in health. As such, the SHIP Team recommended that over the next 18-months, the public health system collectively execute specific areas of focus to support communities of color and low income to provide resources needs and build capacity for better health outcomes.

#### Public Health Infrastructure Issues

The updated SHA data revealed a clear need to enhance and further build the infrastructure for a high functioning and resilient public health system in Illinois. The SHIP Team determined a focus on

improving the public health system infrastructure was necessary to adequately address the Healthy Illinois 2021 priorities. Data identified current public health system strengths in Illinois that should be leveraged and amplified and several challenges that must be improved. The information below describes the existing strengths that Illinois needs to amplify and the challenges that the state needs to address over the next 18 months.

#### **Strengths to Amplify**

- 1. Improve data use, provision, and sharing
  - a. Build on strengths of IDPH for data provision and other key response role,
  - b. incorporate local data into the SHIP, and
  - c. partner to analyze and share actionable data to foster shared messages and response and convert into digestible information.
- 2. Capability of the workforce
  - a. Leverage skills, knowledge and expertise to increase capacity,
  - b. identify how to best augment the strength of workforce capability with the capacity,
  - c. leverage the level of dedication of the public health workforce during COVID-19 response, and
  - d. capitalize on individual employee strengths, interests and abilities and need to take that up to the system level.
- 3. Investigating and diagnosing health issues
  - a. Leverage the capability of the workforce to investigate and diagnose health issues, and
  - b. use this capability to train others and increase capacity to fully implement.
- 4. Coordination and collaboration
  - a. Leverage LHD knowledge and understanding of the health needs of their communities.

#### **Challenges to Address**

- 1. Resource and funding limitations including an adequate public health workforce
  - a. Lack of capacity within the public health system,
  - b. need to match resources and expectations to improve the health of communities,
  - c. need improved resource investment over long period of time,
  - d. funding limitations; including for adequate employee compensation,
  - e. challenges with funding process,
  - f. presence of silos, and
  - g. disconnect in work without resources and approaches put in place.
- 2. Coordination/collaboration for Effective and Seamless Implementation
  - a. Lack of capacity and understanding of where the responsibility lies for expectations and matching that responsibility with resources,
  - b. system partners struggle to implement and recognize a disconnect between what is happening at IDPH versus the priorities for the public health system; greater need for systems alignment, and
  - c. lack of evaluation of SHIP implementation.
- 3. IPLAN Data and Implementation Capacity
  - a. Capability related to the analysis of the IPLANs,
  - b. contradiction in the literature about how to articulate in measurable formats,
  - c. lack of opportunities to describe LHD's work and actions that have been taken, and
  - d. lack of evaluation of IPLAN implementation from certain LHDs.
- 4. Addressing systemic issues related to policy, preparedness, and prevention

- a. Challenge in implementing HiAP and making impactful change through systemic interventions, particularly where health disparities exist,
- b. systemic issues related to resilience of preparedness,
- c. a need for a more proactive approach to prevention by IDPH, and
- d. many regions of government that are complex and difficult for most to navigate (CBOs, patients, etc.).
- 5. Capacity and capability to address social determinants of health (SDOH), structural racism, and health disparities
  - a. Finite resources and getting those resources in the areas that need it the most,
  - b. history of systemic racism in under-resources communities,
  - c. not all share same definition or understanding of SDOH, and
  - d. lack of understanding of whose role it is to address racism, SDOH, and to reduce disparities.
- 6. Equitable investment in rural health and the rest of the state outside of Chicago metro
  - a. Lack of investment in rural health, and
  - b. Lack of investment in capacity in different regions of the state outside of Chicago metro.

#### **Recommended Strategies**

The SHIP Team was asked to use the ASTHO Triple Aim for Health Equity framework by considering the major components to amplify the Illinois Public Health System (IPHS) strengths while addressing the IPHS infrastructure challenges. SHIP Team members worked, discussed, and identified the best way to do this for each component of the model.

#### ASTHO Triple AIM for Health Equity

- 1. Implement a HiAP Approach with Health Equity as the Goal,
- 2. Expand Our Understanding of What Creates Health,
- 3. and Strengthen the Capacity of Communities to Create Their Own Healthy Future.

#### **Strategies**

Members of the SHIP Team split into breakout groups to identify potential strategies to amplify the strengths while addressing the challenges. The table below lists the recommended strategies identified by the SHIP Team. Following the breakout group discussion, three polls were developed using the responses that breakout groups came up with during their discussion on the best strategies/ideas for addressing the IPHS infrastructure challenges by applying the Triple Aim for Health Equity Framework. Top strategies and ideas were identified and polled for each of the 3 components of the model. Not all meeting participants were able to participate. However, the top three suggestions are in bold font in the table.

Implement a HiAP Approach	Expand our Understanding of What Creates Health	Strengthen Community Capacity
Create a fund to support state agencies to create healthy initiatives to support implementation of HiAP vs. good intentions	Build capacity of health and non- health sector about what this means; how to do HiAP; and best practices; agree on a common approach on how to impact policy and promote service and co-learning; Looking at people holistically; a lot of learning comes from working within a community	Implement a multisectoral leadership institute across the state focused applying this framework and building capacity
Provide technical assistance to other state agencies to incorporate health considerations (TA to other agencies from IDPH and/or outside orgs, e.g., IPHI or IPHA)	Develop a way of communicating the benefit of including health in their work. What is the dual benefit or outcome? Understand the drivers of other sectors (e.g., a compelling narrative that	Support a shared services/resources model to increase capacity (I.e., shared EPIs) in areas like data analysis, etc.

	healthy workforce helps economy, etc.)	
Embed health into existing collaborations and task forces at govt. For example, Lt. Gov. Group on justice reform; include adding people with lived experience and provide financial incentives	Engage other ambassadors, messengers – e.g., industry etc. Not just government.	Fund LHDs, particularly small and rural, to support a staff person lead equity implementation and partnership work.
Push for health note with every legislative session with some affirmation of how this will impact health both positively and negatively and thinking of SDOH	Develop a shared understanding of health equity with partners and communities and deliver proactive education	Asset mapping, going deeper into communities in terms of who we engage in health work. Be mindful of multiple sectors, not just govt. level
Create an interagency commission that would explore, recommend, and consider implementation	Ensure organizations and systems to do their own work learning and growth to do health equity work; measure and evaluate their progress; and learn.	Ensure LHDS and communities have access to IPLAN training and local and regional data for planning processes (IPLAN).
Build capacity of health and non-health sector about what this means; how to do HiAP; and best practices; agree on a common approach on how to impact policy and promote service and promote; promote co-learning	Partner with SSDOH experts to ensure resources are available and accessible where community members go (hospitals, schools etc.)	Identify and participate in training on SSDOH for State and local health departments
Integrate equity checklists in all grants and planning processes	Strengthen relationships between schools and LHDs for school- based health improvement. School Health Advisory Committee (pre-COVID) was trying to put together toolkit with school health info such as immunization etc.	Create incentives/compensate people in communities to participate, or ensure we show that we are valuing people's time that they are investing. Look at models of community engagement that value community contributions

Improve community accessibility	The more we can link health to
to resources in an electronic	the economy and economic
format (ex. how to order	progress the more effective we
groceries, how to access	will be (also payers/foundations
telehealth, how to access online	are key)
training)	

#### Conclusion

In alignment with the Healthy Illinois 2021 plan, the SHA/SHIP update shows that chronic disease, mental health and substance use, and maternal and child health continue to emerge as priority health issues along with the added health priority of COVID-19. The SHIP Team identified the following improvements that need to be made over the next 18 months to achieve the shared vision: more collaboration; improved legislative support for public health; improved public health system infrastructure and capacity; improved and consistent communication and messaging; improved data driven health models; and improved resource planning beyond COVID-19. The Team stated that improving in these critical areas will lead to the shared vision of improved outcomes such as decreases in health disparities based on race, improved mental and behavioral health, increased access to care, and preventative maternal and child health.

#### Figure 1. SHIP Team Vison for Success

- More Collaboration
- Increased Legislative Support
- Improved Infrastructure and Capacity Building
- Improved and Consistent/Shared Communication and Messaging
- Improved Health Models that are Data Driven/Data Sharing
- Improved Resource Planning Outside of COVID-19

- Decrease in Health Disparities Based on Race
- Improved Behavioral and Mental Health
- Increased Access to Care
- Preventative Maternal and Child Health Care

In addition, the update also shows a need to focus on equity, improve access to care, emphasize addressing and integrating the social and structural determinants, including structural racism. Finally, the updates show that enhancing and building the public health infrastructure, particularly as it relates to racism and equity, capacity of the public health workforce, and a growing need for timely, actionable, data at the smallest geographical location and population type available, are issues that may have the greatest impact on the health of Illinoisans for the next 18 months.

Beginning in January 2021, implementation planning for the updated SHIP will begin with a recently updated State Health Improvement Plan Implementation Coordination Council (SHIP ICC), appointed by the Governor's Office. The SHIP ICC is an interdisciplinary team that is tasked with developing implementation strategies for the state's SHIP.<sup>12</sup>The SHIP ICC will begin implementation planning by taking a fresh look at the suggested top strategies for improving the IPHS infrastructure using the ASTHO Triple Aim for Health Equity while championing and implementing existing plans to continue to address the health outcome priorities (chronic disease, mental health and substance use, maternal and child health and COVID 19).

Also beginning in January 2021, IDPH, in partnership with UIC P3RC, IPHI and the SHIPICC, will kick-off and conduct a comprehensive equity-driven SHA and SHIP consistent with PHAB requirements and resulting in a new 5-year SHIP and updated data book. This process will run simultaneous to implementing the SHIP Update and will run through June 2022. IDPH will utilize the NACCHO Mobilizing for Action through Planning and Partnerships (MAPP) process. MAPP is a community-driven strategic planning framework that assists communities in developing and implementing efforts around the prioritization of public health issues and the identification of resources to address them.

IDPH will work with the SHIP ICC to develop and implement a robust community engagement process to understand perspectives of diverse communities and stakeholders across Illinois to inform the next 5-year SHIP.

#### **Appendices**

#### LHD IPLAN Priority and Intervention Strategy Analysis References

- Illinois Department of Public Health (nd). A Workbook for Local Public Health Department Administrators, IPLAN Leaders and Community Participants. <u>http://app.idph.state.il.us/pdfs/IPLAN\_workbook\_v2.0.pdf</u>
- 3. Illinois Department of Public Health (nd). Illinois Project of Local Assessment of Needs. http://app.idph.state.il.us/Resources/IPLANProcess.asp?menu=3
- 4. Frieden, T. R. (2010). A framework for public health action: the health impact pyramid. *American journal of public health*, *100*(4), 590-595.
- 5. McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health education quarterly*, *15*(4), 351-377.
- 6. Sallis, J. F., Owen, N., & Fisher, E. (2015). Ecological models of health behavior. *Health behavior: Theory, research, and practice, 5*(43-64).
- 7. Mikkelsen, B. E., Novotny, R., & Gittelsohn, J. (2016). Multi-level, multi-component approaches to community-based interventions for healthy living—a three case comparison. *International journal of environmental research and public health*, *13*(10), 1023.

<sup>12</sup> SHIP Implementation Coordination Council, IDPH: <u>http://www.idph.state.il.us/ship/icc/ship\_icc.htm</u>

8. DeSalvo, K. B., Wang, Y. C., Harris, A., Auerbach, J., Koo, D., & O'Carroll, P. (2017). Public Health 3.0: A Call to Action for Public Health to Meet the Challenges of the 21st Century. Preventing chronic disease, 14, E78. https://doi.org/10.5888/pcd14.170017

#### **SHIP Webinar Slides**

#### **Introduction to SHIP Team Webinar Slides**



by Dr Ezike 9.25.20.FII

#### **SHIP Team Data Presentation 1 Webinar Slides**



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#### **SHIP Team Data Presentation 2 Webinar Slides**



#### **SHIP Team Meeting Slides**

#### SHIP Team Meeting 1



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#### **SHIP Team Meeting 2**



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#### **SHIP Team Meeting 3**



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