The Flint Registry is a powerful tool to understand, measure, and improve the lives of those exposed to contaminated water. The more people who participate in the Flint Registry, the more powerful this tool is for Flint and for communities everywhere that continue to suffer from preventable lead exposure.”

MONA HANNA-ATTISHA, MD MPH FAAP
A Letter from the Flint Registry Leadership Team: Our Work is a Long-Term Commitment

Dear Friend,

As part of a four-year grant from the Centers for Disease Control and Prevention (CDC), the Flint Registry was designed, built, and launched from August 1, 2017, to July 31, 2021. This Flint Registry Inaugural Report shares the activities and outcomes of the first four years of Flint Registry programming. This report is for Flint Registry participants and potential participants, community partners, governmental agencies, and many others.

In this Inaugural Report, we share how Flint Registry participants are doing in areas of health, nutrition, development, and lead elimination. The report also includes information about participant referrals to important public health-promoting services, like health care and nutrition services. And more than just numbers, this report also introduces you to a handful of our incredible Flint Registry staff, as well as shares a few stories about how the Flint Registry has touched the lives of participants.

A big effort like the Flint Registry is only possible thanks to dozens of partners and supporters. The Flint Registry Leadership team would like to express our thanks to our congressional leaders for securing funding for the Flint Registry and the Centers for Disease Control and Prevention for the grant opportunity. A special thank you to all the community partners, service agencies, expert advisors, volunteers, and especially the Flint Registry staff who have been working around-the-clock to ensure the success of this effort.

Lastly, we are sincerely thankful for our most important partners — the participants of the Flint Registry. Thank you for building and being part of something that not only helps people and families, but also helps the city move forward. Beyond Flint, the lessons learned from the Flint Registry are already helping similarly impacted communities across the nation.

The work of the Flint Registry is long-term. With the renewal of Flint Registry support, we look forward to continuing this work with you for years and decades to come!

Sincerely,

Nicole Jones, MS PhD
Director, Flint Registry

Mona Hanna-Attisha, MD MPH FAAP
Director, Michigan State University and Hurley Children’s Hospital Pediatric Public Health Initiative

Lawrence Reynolds, MD FAAP
Medical Advisor, City of Flint & Member, Genesee County Board of Health

Kirk D Smith, MHSA
President & CEO, Greater Flint Health Coalition
BACKGROUND & PLANNING

What was the Flint Water Crisis?
In April 2014, Flint’s drinking water source was changed from the Great Lakes to the Flint River. Without proper corrosion control treatment, the corrosive water created many problems and exposed governmental indifference towards a predominantly poor and minority population. In a city already struggling with major disparities, the Flint water crisis added the burdens of population-wide lead-in-water exposure, Legionnaires’ disease, skin disorders, and the overwhelming trauma of governmental betrayal and broken trust.

Planning for the Flint Registry
Recognizing the widespread nature of the Flint water crisis, the potential long-term health and development implications, and the promise of mitigating interventions, local partners came up with the idea of the Flint Registry and recommended it to the Emergency Operating Center (EOC) during the federal declaration of emergency. The governor-appointed Flint Water Taskforce, which included a Flint resident, also recommended the creation of a “toxic registry.” In 2017, the Michigan Department of Health and Human Services (MDHHS) sponsored a planning grant to Flint-based Michigan State University Pediatric Public Health Initiative to further develop a registry. In December 2016, as part of the Water Infrastructure Improvements for the Nation Act (WIIN Act) that included support for Flint’s pipe replacement work, Congress funded a four-year grant (2017-2021) to Centers for Disease Control and Prevention (CDC) for the creation of a Flint Lead Exposure Registry. In response to the Notice of Funding Opportunity (NOFO), Michigan State University, in partnership with several community partners including the Greater Flint Health Coalition and City of Flint, successfully applied for and received the Flint Registry grant, which officially began August 2017.
CDC’s Goals for the Flint Registry
The Flint Registry was designated by the CDC to be a public health authority, with the following public health goals:

- increased use of preventive services
- reduced lead exposures at work, home, and play
- lower blood lead levels
- better health
- fewer developmental delays

In addition to the goals for Flint Registry enrollees and the greater Flint community, the Flint Registry also hopes to impact the nation and future lead crises by offering:

- more and higher-quality data to guide policies and programs that prevent and eliminate lead poisoning.
- more information about how well different numbers of prevention services improve outcomes.
- more information about how well different types of prevention services improve outcomes.
- more information about short- and long-term effects of lead exposure.

Building the Flint Registry
In the planning period, a framework for Flint Registry operations was developed to enroll individuals and make referrals to support organizations and programs. Subject matter experts in the areas of lead exposure and lead poisoning prevention were consulted, and a variety of software systems were evaluated as potential informatics solutions. Other exposure registries, especially the World Trade Center Registry, were studied to learn about things to include and things to avoid.

Workgroups were assembled to build the Flint Registry: informatics, survey and sampling methods, assessment, lead elimination, marketing and communications, engagement and enrollment, referral network, and public health law. The Flint Registry website was quickly created, and an active marketing campaign was launched, using commercials, social media, mailings, bus wraps, and more. Learning from the World Trade Center Registry, a pre-enrollment survey was released so that people could give feedback on Flint Registry planning and stay connected for early sign-up. When the Flint Registry survey officially launched in December 2018, more than 5,000 individuals had already started the sign-up process!

TAKING FLIGHT
During a Flint Registry planning meeting with community parents, a suggestion from a Flint resident was made to symbolize the Flint Registry with the Sankofa bird. The Sankofa bird is a mythical African bird from the Akan tribe in Ghana. The bird is flying forward, yet looking back, and carrying an egg in its mouth. It is symbolic of always needing to move forward, but never forgetting what happened in the past, and prioritizing the young.
For Flint. By Flint. In Flint.
A Community-Engaged Process

Driven by the practices and principles of community-partnered work, the Flint Registry was designed, built, and implemented to include and elevate community voices. Components of this community-engaged strategy included, but were not limited to, establishing a community advisory board, conducting focus groups, creating a parent partners group, integrating a youth advisory council (Flint Youth Justice League), hiring and training community members physically located in Flint, hosting community events, developing a community ambassador program, collecting pre-enrollment feedback, obtaining Community Ethics Review Board (CERB) approval, recruiting and hiring a Director of Community Implementation and Engagement, conducting robust grassroots community outreach, and more!

Co-chaired by Dr. Lawrence Reynolds and Kenyetta Dotson, the Flint Registry Community Advisory Board promotes communication between residents, parents, public agencies, and schools to facilitate input, increase community awareness, and coordinate activities to benefit those served by the Flint Registry. Flint Registry Community Advisory Board members represent fifteen key sectors of the Flint Community: faith, workforce development, seniors, education, academia, organized labor, non-profit, government, philanthropy, media, health care, behavioral health, parents, youth, and law enforcement. Community Advisory Board members meet regularly to provide guidance and feedback on all aspects of the Flint Registry, including implementation, outreach, marketing, and dissemination.
PEOPLE AND PARTNERS

The Flint Registry Team
nder the leadership of Flint Registry Director Dr. Nicole Jones, the Flint Registry is based at Michigan State University College of Human Medicine’s Division of Public Health in downtown Flint. The Flint Registry employs and supports a passionate team of over 50 individuals, including trained interviewers, data entry personnel, data managers, social scientists, epidemiologists, physicians, public health law experts, community engagement and outreach staff, and more.

A Little Bit About Flint Registry Director Dr. Nicole Jones:

NICOLE is an epidemiologist with over 20 years of experience on research teams and maternal and child health projects. Dr. Jones leads the dynamic Flint Registry staff in collaboration with broad community-based partners. As the Director of the Flint Registry, she strives to elevate the voices of the Flint community in the way that the Flint Registry is designed, implemented, and shared with others. A lifelong resident of Genesee County, Dr. Jones was drawn to the Flint Registry to be part of positive support in the recovery from the Flint water crisis. “I am inspired by the resiliency and spirit of the Flint community.”

Meet a Few of the Incredible Flint Registry Team Members:

IMARI is currently the Referral Process Manager for the Flint Registry. She began working with the Flint Registry in September 2018 as a data entry interviewer, moving up to her current position in just a couple of years. She wanted to be involved with the Flint Registry because it aligned with her passion for helping people, most importantly, the residents of the City of Flint. “I wanted to work for the Flint Registry because I felt it was one step closer to me helping to make a difference not only in this world, but in the community. Being born and raised in Flint, this community is important to me and this public health initiative is something I feel will help the overall health outcomes of the City of Flint and its residents.”

LISA’S job is to help people affected by the Flint water crisis enroll in the Flint Registry by taking a survey, which asks participants to answer a series of questions about their health and experiences in relation to the water crisis. The interactions Lisa has with participants do not begin and end with just a completed survey and a “good luck” on getting referred to resources. Lisa takes it upon herself to find ways to assist those who are struggling, especially during the COVID-19 pandemic. “It’s been really important to me to be able to, as a member of the Registry, help get people extra services and extra help during this pandemic time. It’s been a really important part of my process to add to all of the calls, ‘How are you doing with the pandemic? Are you okay? Do you have what you need? Are your children being fed?’”
AARON works for the Flint Registry as an interviewer and data collector. His job is to interview those affected by the water crisis, connecting them with resources that may help with their struggles. It’s a lot more than that; he wants to hear people’s stories and make them feel heard and understood. It’s extremely important to make sure people are not only being educated, but listened to, Aaron emphasized.

“Making people comfortable enough to want to open up about their concerns and feel free to share their story, that’s one of the biggest things that helps people heal in this city.”
The Flint Registry works with dozens of other grassroots, local, state, and national partners.

- Arab American Heritage Council
- Blue Cross Complete
- Boys and Girls Club of Greater Flint
- Brennan Senior Center
- Carriage Town Ministries
- Catholic Charities Center for Hope
- Child Care Network
- City of Flint
- Communication Access Center for the Deaf and Hard of Hearing
- Crim Fitness Foundation
- Eastside Mission
- Epic Systems
- Fair Food Network
- Flint and Genesee Literacy Network
- Flint Community Schools
- Flint Neighborhoods United
- Flint Public Library
- Flint Strive
- Genesee Community Health Access Program
- Genesee County Community Action Resource Department
- Genesee County Health Department
- Genesee County Medical Society
- Genesee District Libraries
- Genesee Health Plan
- Genesee Health System
- Genesee Intermediate School District
- Genesee Shiawassee Thumb Michigan Works
- Greater Flint Health Coalition
- Greater Holy Temple
- Hamilton Community Health Network
- Hasselbring Senior Center
- Health Alliance Plan
- Hurley Food FARMacy
- Hurley Medical Center
- Kettering University
- LatinX Community Center
- Mass Transportation Authority
- Michigan Department of Health and Human Services
- Michigan Health Information Network
- Michigan State University and Hurley Children’s Hospital Pediatric Public Health Initiative
- Michigan State University Biomedical Research Informatics Core
- Michigan State University Extension
- Mott Community College
- National Kidney Foundation of Michigan
- Neighborhood Engagement Hub
- Network for Public Health Law
- Neurodevelopmental Center of Excellence
- Oak Street Health
- Reverence Home Health and Hospice
- St. Luke’s N.E.W. Life Center
- United Way of Genesee County
- University of California San Francisco
- University of Michigan Child Health and Evaluation Research Center
- University of Michigan-Flint
- University of Michigan Inter-university Consortium for Political and Social Research
- Valley Area Agency on Aging
- Wellness Services
- Young Men’s Christian Association
- Young Women’s Christian Association
- Youth Quest
ENROLLMENT

Who Can Join?
fter around-the-clock work to build the Flint Registry and lots of testing and improvements, the Flint Registry was officially launched for public enrollment in December 2018.

Eligibility Criteria were Set by the CDC and Included:
The Flint Registry is for anyone who was exposed to Flint water because they lived, worked, attended school, or regularly visited the City of Flint during April 2014-October 2015, including children who were born before August 1, 2016, that may have been exposed prenatally.

How to Enroll
After it is determined that an individual is eligible to join, a participant enrolls by completing a survey that includes questions about their health, development, nutrition, and ongoing lead exposures. It takes about 30 minutes to complete the survey. There are several ways participants can choose to enroll in the Flint Registry. The most common way people choose to enroll is online at www.flintregistry.org.

People can also enroll over the phone by calling 833-GO-FLINT. The Flint Registry trains and maintains a robust survey staff who have made over 500,000 phone calls.

Referral to Services
Participants are referred to a variety of services based on their survey responses. Referral services fall into four buckets: lead elimination, health, child development, and nutrition. The goal of referrals is to improve public health.

<table>
<thead>
<tr>
<th>LEAD ELIMINATION</th>
<th>HEALTH</th>
<th>CHILD DEVELOPMENT</th>
<th>NUTRITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Flint – Lead Service Line Replacement Program</td>
<td>Greater Flint Health Coalition (GFHC) – Genesee Community Health Access Program (CHAP)</td>
<td>GISD – Early On</td>
<td>GCCARD – Emergency Food Assistance Program &amp; Commodities Food Program</td>
</tr>
<tr>
<td></td>
<td>GFHC – Elevated Blood Lead Level (EBLL) Nurse Case Management Program</td>
<td>GISD – Great Start Readiness Program</td>
<td>Genesee County Health Department – Women, Infants &amp; Children</td>
</tr>
<tr>
<td></td>
<td>Genesee Health System (GHS) – Behavioral Health and Stress Counseling, Family Supports Coordination</td>
<td>GISD – Successful Kids = Involved Parents</td>
<td>MDHHS – Supplemental Nutrition Assistance Program</td>
</tr>
<tr>
<td></td>
<td>Genesee Health Plan (GHP) – Plan B, Senior Dental Services, Health Screening and Support Services for Women</td>
<td>MDHHS – Child Development Care Program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valley Area Agency on Aging (VAAA) – Senior Programs, Medicare, Transportation Services</td>
<td>Flint Public Library – Imagination Library</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hamilton Community Health Network (HCHN) – Adult Dental Services</td>
<td>Reverence Home Health and Hospice/Hurley Medical Center – Maternal Infant Health Program</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GHS – Neurodevelopmental Center of Excellence</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mott Children’s Health Center – Child and Adolescent Dentistry</td>
<td></td>
</tr>
</tbody>
</table>
Flint Registry Enrollment

Cumulative Enrollment by Month

Method of Enrollment

- Online 74%
- Phone 18%
- Paper 6%
- In-person 1%
- Multiple Methods 1%

16,076 Total Participants Enrolled in Flint Registry through July 2021

Demographics

- 31% Children
- 69% Adults

Youngest participant 2 years and oldest participant 104 years

Enrollment by City of Flint Ward

Percentage reflects total enrolled out of total population in that ward.

WARD 1 12%  2019
WARD 2 12%  2020
WARD 3 13%  2021
WARD 4 8%  16,076
WARD 5 11%  Total Participants
WARD 6 12% Enrolled in Flint Registry
WARD 7 13% through July 2021
WARD 8 10%  31% Children
WARD 9 10%  69% Adults

Residency at Time of Enrollment

- Flint 83%
- Genesee County, not Flint 11%
- Michigan, not Genesee County 4%
- U.S., not Michigan 2%

Youngest participant 2 years and oldest participant 104 years
Flint Registry Kids

4,981
Total Number of Children Enrolled

49%
Girls

51%
Boys

Race

- Black or African American Only 64%
- White or Caucasian Only 21%
- Other Minority 2%
- More than One Race 11%
- Missing 2%

Grade at Enrollment

Preschool 7%
Kindergarten 9%
1st-5th Grade 39%
6th-8th Grade 22%
9th-12th Grade 19%
HS Grad or GED <1%
Not Attending School 4%
Don’t know <1%

I’m so grateful to the Flint Registry for getting us connected to a neurologist and other services. Now my son receives special education that he was not getting before the Flint Registry.”

– NAKIYA
How are Flint Registry Children Doing?

The Flint Registry survey includes many questions to see how people are doing. Included below are a few questions from the survey and the responses.

**Family Income**
Since your child was born, how often has it been very hard to get by on your family’s income — hard to cover the basics like food and housing?

- Never: 17%
- Rarely: 37%
- Somewhat Often: 35%
- Often: 11%

**Lead**

**Was your child’s current home ever tested for lead in the water?**
- No: 27%
- Yes: 54%
- Don’t Know: 19%

**Did it ever test higher than 5 parts per billion?**
- No: 34%
- Yes: 17%
- Don’t Know: 49%

**Does your child currently live in a home that has lead or galvanized water service pipelines from the water main to his/her home?**
- No: 49%
- Yes: 10%
- Don’t Know: 41%

**Has the City of Flint’s lead service line replacement program (FAST Start program) replaced the lead or galvanized water service pipelines from the water main to the home your child lives in?**
- Non-Resident: 31%
- No: 21%
- Don’t Know: 49%

**Has a healthcare provider ever told you that your child had an elevated blood lead level (5 micrograms per deciliter or more)?**
- No: 79%
- Yes: 8%
- Don’t Know: 13%
Physical Health
In general, how would you describe your child’s physical health?

Mental Health
In general, how would you say your child’s mental health is?

How often in the last 12 months has your child had:
- Skin Rash or Irritation
- Problems with Hearing

Has your child ever been diagnosed with any of the following medical conditions?

<table>
<thead>
<tr>
<th>Disease</th>
<th>Prevalence Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eczema/Skin Allergy</td>
<td>29</td>
</tr>
<tr>
<td>Allergies</td>
<td>29</td>
</tr>
<tr>
<td>Asthma</td>
<td>20</td>
</tr>
<tr>
<td>Severe Headaches/Migraines</td>
<td>9</td>
</tr>
<tr>
<td>Anemia</td>
<td>3</td>
</tr>
<tr>
<td>Vision Problems (Blindness, etc.)</td>
<td>2</td>
</tr>
<tr>
<td>Diabetes</td>
<td>1</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>1</td>
</tr>
<tr>
<td>Arthritis</td>
<td>1</td>
</tr>
</tbody>
</table>
Development
Has a doctor, other health care provider, or educator (such as a teacher or school nurse) ever told you that your child has:

- Developmental Delay?
  - No 83%
  - Yes 13%
  - Don’t Know 4%

- Speech or Other Language Disorder?
  - No 83%
  - Yes 14%
  - Don’t Know 3%

- Learning Disability?
  - No 91%
  - Yes 5%
  - Don’t Know 4%

- Autism or Autism Spectrum Disorder
  [Including Asperger’s Disorder or Pervasive Developmental Disorder (PDD)]?
  - No 80%
  - Yes 16%
  - Don’t Know 4%

Have you had any concerns that your child does not catch on or learn new things as quickly as other children his/her age?

- No 73%
- Yes 25%
- Don’t Know 2%

“We signed up for the Flint Registry to access resources and find some help. My son was diagnosed autistic and referred to Neurodevelopmental Center of Excellence — that’s really helped us getting him services in school and autism behavioral therapy.”

— MAXINE
**Nutrition**

Which of these statements best describes the food situation in your child’s household in the past 12 months?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>We could always afford to eat good, nutritious meals.</td>
<td>33</td>
</tr>
<tr>
<td>We could always afford enough to eat but not always the kinds of food we should eat.</td>
<td>50</td>
</tr>
<tr>
<td>Sometimes we could not afford enough to eat.</td>
<td>15</td>
</tr>
<tr>
<td>Often, we could not afford enough to eat.</td>
<td>2</td>
</tr>
</tbody>
</table>

More information about how Flint kids are doing can be found at [www.stateofflintkids.com](http://www.stateofflintkids.com).
How are Flint Registry Adults Doing?

The Flint Registry survey includes many questions to see how people are doing. Included below are a few questions from the survey and the responses.

11,095
Total Number of Adults Enrolled

69%
Females

31%
Males

Physical Health
In general, how would you describe your physical health?

Mental Health
In general, how would you rate your mental health, including your mood and your ability to think?
Has a healthcare provider ever diagnosed you with this condition:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Prevalence Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Blood Pressure</td>
<td>46</td>
</tr>
<tr>
<td>Arthritis</td>
<td>40</td>
</tr>
<tr>
<td>Depression</td>
<td>36</td>
</tr>
<tr>
<td>High Cholesterol</td>
<td>34</td>
</tr>
<tr>
<td>Rashes</td>
<td>27</td>
</tr>
<tr>
<td>Asthma</td>
<td>21</td>
</tr>
<tr>
<td>Anemia</td>
<td>22</td>
</tr>
<tr>
<td>Vision Problems (not corrected by glasses)</td>
<td>19</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>18</td>
</tr>
<tr>
<td>Chronic Bronchitis</td>
<td>13</td>
</tr>
<tr>
<td>Kidney Stones</td>
<td>10</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>10</td>
</tr>
<tr>
<td>Hypothyroidism</td>
<td>7</td>
</tr>
<tr>
<td>Kidney Failure</td>
<td>7</td>
</tr>
<tr>
<td>Angina or Coronary Heart Disease</td>
<td>7</td>
</tr>
<tr>
<td>Deaf or Hard-of-Hearing</td>
<td>7</td>
</tr>
<tr>
<td>Cancer</td>
<td>7</td>
</tr>
<tr>
<td>Decreased Sperm Count (males)</td>
<td>6</td>
</tr>
<tr>
<td>Fibromyalgia</td>
<td>6</td>
</tr>
<tr>
<td>Gout</td>
<td>6</td>
</tr>
<tr>
<td>Hyperthyroidism</td>
<td>4</td>
</tr>
<tr>
<td>Emphysema</td>
<td>4</td>
</tr>
<tr>
<td>Heart Attack (Myocardial Infarction)</td>
<td>4</td>
</tr>
<tr>
<td>Stroke</td>
<td>4</td>
</tr>
<tr>
<td>Infertility</td>
<td>3</td>
</tr>
<tr>
<td>Lupus</td>
<td>2</td>
</tr>
<tr>
<td>Essential Tremor</td>
<td>2</td>
</tr>
<tr>
<td>Retinal Hemorrhage</td>
<td>1</td>
</tr>
<tr>
<td>Parkinson’s</td>
<td>0</td>
</tr>
</tbody>
</table>

“When my mom joined the Registry, there was a big change. Just being around positive community members and meeting new people … Along this journey from different community programs, we’ve met a lot of good people. Just a really positive outlook — it was definitely a change that’s been really helpful.”

— HEAVENS
Lead

Was your current home ever tested for lead in the water?
- No 22%
- Yes 61%
- Don’t Know 17%

Did it ever test higher than 5 parts per billion?
- No 28%
- Yes 21%
- Don’t Know 51%

Has the City of Flint’s lead service line replacement program (FAST Start program) replaced the lead or galvanized water service pipelines from the water main to the home you live in?

Nutrition

Within the past 12 months, were you worried that your food would run out before you got money to buy more?
- No 56%
- Yes 43%
- Don’t Know 1%

Please tell us your opinion about the following statement: A large selection of fresh fruit and vegetables is available in your neighborhood:

- Strongly Agree 14%
- Agree 38%
- Neither Agree nor Disagree 22%
- Disagree 19%
- Strongly Disagree 7%
In summary, participants’ surveys showed that people have many concerns about their health, development, nutrition, and ongoing lead exposure. Based on these concerns, Flint Registry participants were referred to support services to help meet these needs.

**Referrals to Meet Needs**

As a CDC-designated public health authority, the Flint Registry was designed to improve the health and development of participants by connecting individuals to supporting services. To achieve this, the Flint Registry leverages the Community Referral Platform, established locally by the Greater Flint Health Coalition as a component of the State Innovation Model. The Community Referral Platform uses technology from the Michigan Health Information Network (MIHIN), formerly a product of Great Lakes Health Connect, to securely refer residents to dozens of services while including the ability to track if the individual got connected to the referred service. Based on a Flint Registry participant’s answers to survey questions, participants who may be eligible for new services and referrals are sent directly to service providers by using the Community Referral Platform tool. Working closely with service agencies, the Flint Registry staff tracks the referrals to make sure a participant’s needs were met.

The Flint Registry’s first referral was sent in January 2019. By the end of the four-year grant period (July 2021), the number of referrals quickly climbed to 22,317.

### Top Referral for Each Domain

<table>
<thead>
<tr>
<th>Domain</th>
<th>Agency</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Genesee Health System</td>
<td>Access Center</td>
</tr>
<tr>
<td>Lead Elimination</td>
<td>City of Flint</td>
<td>FAST Start Program</td>
</tr>
<tr>
<td>Child Development</td>
<td>Genesee Health System</td>
<td>Neurodevelopmental Center of Excellence</td>
</tr>
<tr>
<td>Nutrition</td>
<td>Genesee County Community Action Resource Department</td>
<td>Emergency Food Assistance Program</td>
</tr>
</tbody>
</table>

### Top 5 Referral Organizations

**for Children**
- Neurodevelopmental Center of Excellence 44%
- Lead Safe Home Program 35%
- Medicaid Expansion 6%
- CHAP Elevated Blood Lead Level Nurse Case Management 3%
- Mott Children’s Health Center Child and Adolescent Dentistry 3%

**for Adults**
- FAST Start 32%
- Genesee Health System Access Center 12%
- Emergency Food Assistance Program 11%
- Supplemental Nutrition Assistance Program 10%
- Double Up Food Bucks (Fair Food Network) 9%
One Year Follow-Up Survey
The Flint Registry one year follow-up survey was launched in September 2020, to find out how participants are doing a year after their first survey and to evaluate the Flint Registry’s effectiveness by asking about referral and service utilization. Also included were questions related to the impact of COVID-19 on healthcare and technology access, employment, symptoms, and stress. Future reports will include details about what is being learned from the one year follow-up survey.

3,989
Completed one year follow-up surveys

67% Females
33% Males

28% Children
72% Adults

COVID-19 Impact
In response to COVID-19, Flint Registry operations were swiftly transitioned to remote settings in March 2020, in-person interviews were suspended, and outreach efforts were hosted as virtual events. Despite the changes, the Flint Registry has continued to extend outreach to many areas in the community, enroll participants, and refer them to services to help meet their needs. In addition, questions about the impact of COVID-19 were added to the pre-planned survey launch of the Flint Registry one year follow-up survey, which serves as a real-time example of how the Flint Registry infrastructure can be leveraged for other public health concerns.
Flint Lead Free

Flint Lead Free is the lead elimination workgroup of the Flint Registry. With multi-sector partners, the Flint Lead Free effort has a goal of eliminating all sources of childhood lead exposure. The Flint Registry contributes to lead elimination efforts by convening Flint Lead Free partners, enrolling individuals exposed to the lead-contaminated Flint water, screening for ongoing environmental lead exposure via a survey of environmental risks, and connecting individuals to lead-eliminating services like the Lead Safe Home Program. The Lead Safe Home Program is a free program that finds and removes lead in a child’s home. Preliminary economic analysis of Flint’s lead elimination efforts estimates that lead prevention activities will generate $53.3 million in future economic benefits for children when considering the number of pipes replaced and homes abated from 2016 to 2019. While there has been steady progress, the global COVID-19 pandemic has created challenges as more children have been inside homes with potential lead exposure, blood lead screening rates have decreased, and pauses have occurred in lead abatement work. Lead exposure remains a disproportionate burden in the environments of Flint children, reinforcing the need for Flint Lead Free to continue and enhance its work.

View the Flint Lead Free Report at www.flintregistry.org/flint-lead-free/.
Conclusion

In the first four years (2017-2021), the Flint Registry has established itself as a critical community program, always evolving and growing to meet the needs of the Flint community. The information that has already been learned from the Flint Registry shares the ongoing challenges faced by the Flint community and the vital role that the Flint Registry plays to alleviate those challenges. **True to its original intent, the Flint Registry is improving Flint’s public health.**

As the Flint Registry begins its fifth year of programming, and hopefully many more years to come, the long-term work continues. The Flint Registry continues to prioritize its mission of improving public health by connecting, supporting, and counting those impacted by the Flint water crisis. The Flint Registry continues community engagement, outreach, and enrollment, with special efforts to recruit high-risk individuals like children and families that had lead service lines. For individuals already enrolled in the Flint Registry, future years of programming will include keeping in touch with participants via follow-up surveys and ongoing connections to critical public health promoting services.

As realized by both the Flint water crisis and now the global COVID-19 pandemic, investments in public health infrastructure not only have the opportunity to prevent public health crises, but they can also be readily leveraged to minimize the impact of a crisis. The built public health infrastructure of the Flint Registry continues to buffer the impact of the Flint water crisis while also proactively supporting participants during these unprecedented times.

Thank You

Funding for this work was supported by the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) under award number NUE2EH001370 as part of an award totaling $16,710,339 with 0% funded with non-governmental sources. Support for the Flint Registry, especially to enroll children in the Registry, is also provided by the Genesee County Health Department, which is funded by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) for the Healthy Start project under prime award number U62MC31100 and subaward number 18-189, and funds from the State of Michigan Department of Education. The views expressed in this material do not necessarily represent the official views of, nor an endorsement by, CDC, HRSA, HHS, the U.S. Government, Genesee County Health Department, or the State of Michigan Department of Education.
BY THE NUMBERS

16,076 Total Participants
91,420 Connected Phone Calls
272,303 Mailings
60,000 Masks Mailed
441 Community Events
510 Ambassadors Trained
62 Partners
22,317 Referrals
85 Staff Members
161,140 Webpage Visits
512,000 Social Media Reach

There is still time to enroll in the Flint Registry. To sign up or for more information, visit us online at www.FlintRegistry.org or call 1-833-GO-FLINT. We look forward to hearing from you!