2019 Annual Report





This report was prepared by the City of Milwaukee Health Department in accordance with Ch.59 of the City of Milwaukee Code of Ordinances.

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Photo: City of Milwaukee Health Department staff, executive leadership, and Board of Health members





MEMBERS
Ruthie Burich-Weatherly
Caroline Gomez-Tom
Bria Grant
Ald. Chantia Lewis
Dr. Ian Martin
Julia Means
LaNelle Ramey

Ericka Sinclair Wujie Zhang

December 8, 2020

Dear Community,

In 2019, the City of Milwaukee reestablished its Board of Health. This nine-member governing board is responsible for assuring city residents that the City of Milwaukee Health Department (MHD) is fulfilling the responsibilities mandated by the state, advising the department on priorities, taking stances on public health policy issues, and act as champions for public health in Milwaukee. These positions were appointed by Mayor Tom Barrett after an application and interview process and each member was confirmed by the Common Council.

As you may know, the MHD has faced many challenges over the years. There were significant concerns about the way childhood lead poisoning cases were handled under the previous leadership. The department is diligently working to improve their response once a case of lead poisoning has been identified and resolve subsequent ongoing investigations from multiple state agencies.

As we write this letter, we are also diligently working on supporting the MHD in their COVID-19 pandemic response operations with additional executive leadership changes with Dr. Jeanette Kowalik resigning from her Commissioner of Health role. The Board of Health is working closely with Interim Commissioner Marlaina Jackson as she strives to refine the department's leadership changes, enhance various processes to increase efficiency while managing an emergency pandemic response for the remaining of the year and into 2021.

As a board, we believe, in order to achieve success in health equity we must come together to address social determinants of health and mitigate the impacts that racism plays in public health. This board will continue to support efforts that work to eliminate gaps of services in public health that disproportionately affect communities of color. We are encouraged by the strides of improvement made by the health department and look forward to being deeply engaged with our community in the long, winding journey to allot the ability for all Milwaukee residents to live their best lives. Please visit our website at www.milwaukee.gov/boardofhealth more information and look for ways to get more involved. We look forward to the work that lay ahead, and to a healthier Milwaukee.

Yours in Health,

Ruthie Burich-Weatherly- Chair Caroline Gomez-Tom Bria Grant Alderwoman Chantia Lewis Ian B.K. Martin, MD MBA Julia Means LaNelle Ramey Ericka Sinclair – Vice Chair Wujie Zhang, PhD

2019 ANNUAL REPORT TO THE COMMUNITY

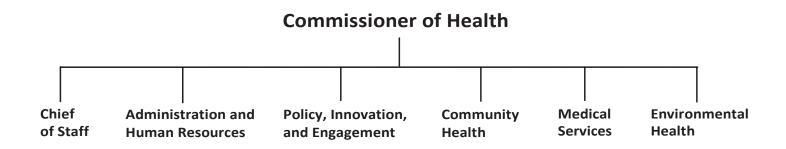
Message from the Interim Commissioner of Health

2019 was a year of change for the City of Milwaukee Health Department (MHD).

Our department reorganization began in December 2018. The majority of the changes were instituted in the 3rd quarter of 2019. Mainly, the department shifted from three divisions to five branches containing 11 divisions. Four of the branches are now managed by Deputy Commissioners, which serve not only as cornerstones of the foundation of the new MHD but they are primed to serve in an "on call rotation" capacity to the Commissioner of Health.

This change was in response to the lack of legal coverage and support for the Commissioner, which was realized through leadership changes in 2018.

The MHD is aiming to eliminate gaps, which can compromise MHD's ability to meet its obligations to provide essential public health services per state of Wisconsin and federal laws and regulations.



2019 ANNUAL REPORT TO THE COMMUNITY

The leadership team embarked on a rebranding initiative. This was necessary to symbolize the department's desire to move beyond the challenges of the past. The new logo and brand was the result of a community informed process that used social media to vote for the top brand. The brand served to represent the updated mission and vision of the department.









The most significant change of 2019 was the establishment of the <u>City of Milwaukee Board of Health</u> (BoH). This nine-member body was the result of a community call for volunteers, assessment of applications by the requirements of the <u>newly developed ordinance</u>, interviews, nominations, appointment by Mayor Tom Barrett, and confirmation by the 15-member Common Council. The BoH began to meet in the fall of 2019. Since this point in time, the BoH has demonstrated tireless commitment to the City of Milwaukee, guiding the MHD in advancing beyond the challenges of the past, and evoking new hope and restored confidence in the department.

As I write this letter, I would be remiss in not acknowledging the delay in executing this report in light of the COVID-19 pandemic response and our previous Commissioner of Health, Dr. Jeanette Kowalik resigning after almost 2.5 years of service. As your current Interim Commissioner, I assure you that MHD staff is working tirelessly to improve processes, hold commitment to serving our communities despite executive leadership changes, and maintaining essential mission services while balancing the pandemic response operations. Despite the continued challenges and curveballs, I am grateful to be working side- by-side with a dedicated and passionate workforce. Our commitment will always include looking for ways to be more efficient, innovative, and support a culture of health in and outside of our department. Thank you for the opportunity to serve our community.

Marlaina Jackson
Interim Commissioner of Health

How to Use the Annual Report

The City of Milwaukee Health Department's 2019 annual report is comprehensive and includes information on each division, office, and program within the department. As a result, the report is dense with information. Unlike traditional annual reports, this report is most useful when used as a reference document to learn about a specific division, office, or program within the department.

Program information is organized under four primary sections: Community Health, Environmental Health, Medical Services, and Policy, Innovation, and Engagement. Each of these branches has several programs or special initiatives embedded in them. Use this report to:



Learn about each public health program

Each program or special initiative includes a brief description of the program, the target population, target geographic area, priority health areas, and evidence-based practices utilized.



Access 2019 operations data

Operations data, including 2019 expense information, staffing structure, and active grants received over the course of the year, is included for each program.



Review data on each program's performance

Each program includes five years of performance measure data which highlights key deliverables offered by the program. Most programs also include population or program outcome data to describe the impact of the program on Milwaukee or the clients served.



Learn about each program's 2019 accomplishments and challenges
Health department programs celebrated a number of accomplishments in

2019; however, programs also experienced a number of challenges. Learn about each program's accomplishments and challenges.

The report was prepared by the City of Milwaukee Health Department for the Mayor and Common Council in accordance with Ch. 59 of the City of Milwaukee Code of Ordinances.



Department Overview

Since 1867, the City of Milwaukee Health Department (MHD) has served the residents of the City of Milwaukee by seeking to improve and protect the health of all who live, work, and play within the city. Although most of the department's programs and interventions have changed, over 150 years later the department remains steadfast in this mission. Today, as the largest local health department in Wisconsin, the MHD now serves nearly 600,000 residents through direct services, evidence-based programs, partnerships, and policy development.

The MHD's work centers around four goals – control and prevent disease; promote health and wellbeing across the lifespan; assure safe and health living environments; and conduct public health planning and policy development.

Vision

Living your best life, Milwaukee.

Mission

Advance the health and equity of Milwaukeeans through science, innovation, and leadership.

Values

Innovation: We believe in nurturing creativity and new ideas that challenge us to do our everyday work better.

Equity: We acknowledge historic and current injustices in our community and strive to cultivate an environment where everyone in our community has equal opportunity to be healthy.

Collaboration: We convene community members, partners, and elected officials to meet the needs of our community.

Courage: We take strategic risk and bold initiative to advocate for and prioritize the needs of our community.

Accountability: We act with transparency and integrity to advance the health of Milwaukee.

Quality: We continuously improve and adapt to create sustainable and positive health outcomes.

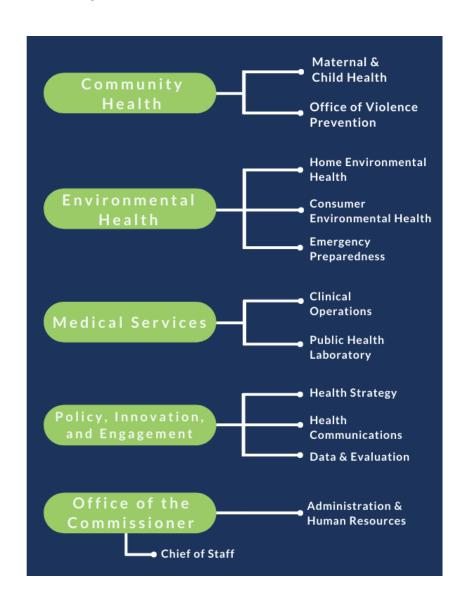


Structure

The MHD began a department-wide restructuring in December 2018 and instituted the bulk of the changes in 2019. After several rounds of restructuring, we have landed on five branches containing 11 divisions. Four of the branches are now managed by Deputy Commissioners, with operational direction from the Chief of Staff, who serve not only as cornerstones of the foundation of the new MHD but are also primed to serve in an "on call rotation" capacity to the Commissioner of Health. The need for this back up support was realized during the leadership changes of early 2018. The MHD is aiming to address these gaps in order to enhance MHD's ability to provide essential public health services per state of Wisconsin and federal laws and regulations.

MHD Branches and Divisions

The MHD carries out our mission through five branches consisting of 11 divisions.



Major Accomplishments

The Milwaukee Health Department celebrated a number of accomplishments in 2019.

Reestablishment of the Board of Health

In 2019, the City of Milwaukee reestablished its Board of Health. This nine-member governing board is responsible for assuring city residents that the MHD is fulfilling the responsibilities mandated by the state, advising the department on priorities, taking public stances on public health policy issues, and being champions for public health in Milwaukee. Positions were appointed by Mayor Tom Barrett after an application and interview process and each member was confirmed by the Common Council.

Innovative policy, system, and environmental interventions:

- Issued Vaping Advisory following the hospitalization of 16 individuals with severe chemical pneumonia linked to vaping products – first in nation to do so
- First year of mandatory posting of Food Sanitation Grades: CDC Risk Factor
 Violations have reduced by 5% since system implementation
- Milwaukee Overdose Response Initiative (MORI): Hosted two community events and launched an opioid awareness campaign
- Began drafting a Performance Management and Quality Improvement plan
- Established the Birth Outcomes Made Better (BOMB) Doula Program
- Government Alliance on Race and Equity Staff Committee
- Declared Racism as a Public Health Crisis at the City level
- Acquired new technology to enhance MHD operations
- 414 Life Violence Interrupter Program

Additional accomplishments:

- Renewed commitment to partnerships and Community Health Improvement Plan (MKE Elevate), Milwaukee area STI Strategic Plan, Democratic National Convention preparation, and convening public health partners
- 18th Annual Back to School Health Fair- 3,800 served thanks to public-private partnerships and fundraising efforts
- Increased in-house expertise while leveraging local partnerships to increase reach
- New and renewed grant funding, Lead program finally out of high-risk status with Housing and Urban Development
- Exceeded program goals and objectives (e.g. WIC, CHAP, MBCAPP Well Woman)
- Health promotion campaigns for the Office of Violence Prevention



Key Challenges

The MHD also experienced a number of challenges over the course of 2019. Despite these challenges, outlined below, the MHD provided critical services to thousands of Milwaukee residents.

Human resources/personnel challenges: time required to fill vacancies, large number of vacancies, retention, pay below market for some vital positions, diversity at professional and leadership levels, need for more local formally-trained public health professionals, inconsistent professional development opportunities for all, variety of management challenges, and lingering personnel issues

Perception of MHD in the media and community: need to change the narrative and promote the good work via staff that are dedicated to serving the community

Lack of an Electronic Health Record system to increase efficiency, cost savings, management of care, expand family planning services, and collect data for performance improvement across all three clinics

Lack of data analytics tools: no statistical software for qualitative data and few for quantitative data

Need for program autonomy while complying with program requirements

Audit overkill: lead program has had 5 since fall 2018. Two are still ongoing (e.g. State DOJ Criminal investigation)

Lack of performance management system to help MHD tell our story and advocate for additional funding

Impact of national anti-immigrant sentiment on local communities: decreased service utilization due to fear which negatively impacts birth outcomes

Activities seen as both Strengths and Weaknesses

Cost saving measures: loss of Zilber School of Public Health office space, reassigned MHD maintenance staff and clinic housekeeping to Department of Public Works, consolidated teams to increase cohesion (e.g. Lead, Consumer Environmental Health)

Communications: internal and external have increased but are still inconsistent due to gaps in staffing

Policies and procedures: lack of policies and procedures as well as the need for updates of existing policies and procedures



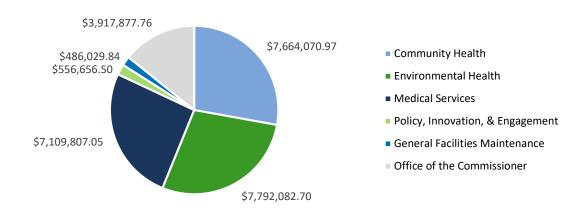
Expenses and Workforce

The operations of the City of Milwaukee Health Department are funded through City Operations and Maintenance (O&M), grants, capital, and to a lesser extent, reimbursable funds. O&M is also known as "tax levy".

City of Milwaukee Health Department Expenditures by Funding Source

	2015	2016	2017	2018	2019
O&M	\$12,606,226	\$13,524,425	\$13,726,808	\$13,555,698	\$16,122,871
Grant	\$9,778,593	\$10,531,949	\$10,823,306	\$10,450,150	\$9,388,247
Reimbursable	\$45,950	\$65,631	\$68,440	\$2,094	\$785,819.50
Capital	\$622,312	\$386,708	\$217,926	\$977,318	\$1,229,587.10
Total Expenses	\$23,053,081	\$24,508,713	\$24,836,481	\$24,985,260	\$27,526,525

2019 MHD Expenses by Branch

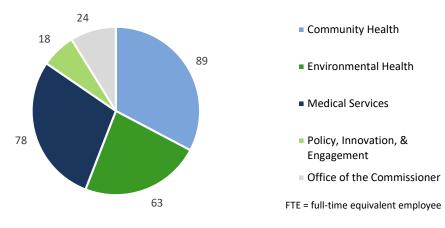


City of Milwaukee Health Department Personnel

	2015	2016	2017	2018	2019
O&M FTE:	139.79	139.18	138.20	136.70	166.02
Non-O&M FTE:	100.45	102.65	102.80	108.85	105.98
Total FTE:	240.24	241.83	241.00	245.55	272

FTE = full-time equivalent employee (40 hours/week)

2019 MHD Total FTEs by Branch



Community Health

Maternal and Child Health

Office of Violence Prevention

Environmental Health

Consumer Environmental Health
Home Environmental Health
Emergency Preparedness & Environmental Health

Medical Services

Clinical Operations

Laboratory Services

Policy, Innovation, and Engagement

Maternal and Child Health





DIVISION OPERATIONS

Branch & Division:	Community Health: Maternal and Child Health
2019 Expenses:	
O&M Expenses:	\$1,754,481
Grant Expenses:	\$3,295,865
2019 Staffing:	
O&M FTE:	33.60
Grant FTE:	47.40
Total FTE:	81
Total positions vacant at any point in 2019	25



Community Healthcare Access

The City of Milwaukee Health Department Community Healthcare Access Program (CHAP) assists community members in accessing the health care coverage they need. CHAP helps community members determine their options under the Affordable Care Act, helps determine eligibility for BadgerCare (Medicaid), and assists in accessing Family Planning Only Services, and Express Enrollment for pregnant women and children, Senior Care, and Title 19. CHAP can also facilitate enrollment or provide referrals for enrollment in FoodShare, energy assistance, tax preparation, dental services, Women, Infants and Children (WIC), and free and sliding-fee clinics.

While CHAP can serve the entire city of Milwaukee and the State of Wisconsin, there is a particular focus on residents in ZIP codes where infant mortality rates are high. CHAP staff provide services at community organizations and are available to assist individuals on weekdays at the Southside Health Center, Northwest Health Center, and Keenan Health Center.

PROGRAM OPERATIONS

Branch & Division:	Community Health: Maternal and Child Health
Established:	1999
2019 Expenses:	
O&M Expenses:	\$229,405
Grant Expenses:	\$200,663

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
Medical Assistance Outreach - Forward Health	State of WI-Department of Health Services-Division of Health Care Access and Accountability	1/1/19- 12/31/20	\$395,146
City Match-MA Outreach-Forward Health (O&M)	O&M City Match	1/1/20- 12/31/20	\$423,766

PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019
# of individuals who completed full applications for BadgerCare Plus	3735	3793	3873	3309	1638
# of express enrollments in BadgerCare Plus - Children	55	46	13	10	54
# of express enrollments in BadgerCare Plus - Women	37	35	30	20	30
# of Non-Qualified Immigrant Pregnant Women enrolled in BadgerCare Plus	112	92	86	57	63
# of childless adults enrolled in BadgerCare Plus	300	518	907	880	158*
# clients enrolled in Family Planning Only Services (FPOS)	114	404	304	435	89**
# of enrollment events					172
# of requests for technical assistance (application support)	3223	3554	3933	5602	3173
# of new Community Based Organization partnerships	8	5	5	4	8
# of FoodShare applications and renewals	1520	1480	1161	834	1735*

This service enrolls undocumented mothers in insurance coverage that lasts through delivery.

The CHAP program does an exemplary job in developing trust with the community. As a result, there are more technical assists than new enrollments over the past three years.

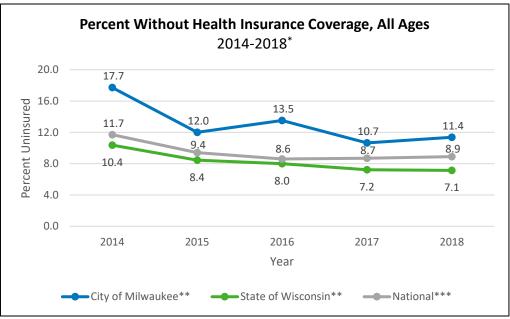
2019:

787 new applications, 464 annual renewals, 484 six-month renewals

^{*}Full year is not represented as database went live around end of $\mathbf{1}^{\text{st}}$ quarter

^{**2019} data includes full applications and renewals (express enrollments not included). Full year is not represented as database went live around end of 1st quarter

POPULATION HEALTH OUTCOMES



^{*2019} data not yet available

Sources: City and State: Wisconsin Family Health Survey, WI DHS; National: American Community Survey, U.S. Census Bureau

2019 KEY ACCOMPLISHMENTS

- 1. CHAP successfully surpassed 2019 goals in new BadgerCare online application, renewals, and new community partnerships!
- 2. The CHAP program does a tremendous job at technical assistance. On average, 17-19% of all technical assists were for problems not related to a client's benefits, including but not limited to: calling the HMO advocate to help get an appointment; calling another state benefits office for the client to close out their case (occasionally do this for clients experiencing homelessness); connecting clients to 2-1-1 or other agencies; calling billing departments to update client's status; or simply calling the pharmacies when clients are having trouble getting their medications.
- 3. CHAP functions best when it is utilized as a gateway to other health services. The goal is to connect CHAP to other MHD programs and most recently, a retinopathy program spearheaded by MCW that will provide primary screening services to MHD clients. In 2020, all CHAP staff will receive training to assist with retinopathy screenings.

2019 KEY CHALLENGES

- 1. Not being fully staffed and awaiting the slow process of petitioning to add the 3 approved positions to the positions' ordinance
- 2. The MCH epidemiologist resigned in February causing a gap in productivity towards solidifying work flows/enhanced database and tracking
- 3. There is no Coordinator position under the CHAP Program Manager which causes some difficulty in maneuvering the day to day needs of staff with Program Manager level duties
- 4. CHAP is in need of a case management system & phone system to allow for recording signature; particularly during COVID where remote servicing is imperative to program sustainability and the community's access to care/benefits

^{**}Includes those uninsured for part or all of the year

^{***}includes only current status at time of survey



The Direct Assistance for Dads (DAD) Project is a voluntary, long-term home visiting program that engages fathers in the Men's Health Program with intensive, evidence-based home visiting services. The program works to strengthen fathers' involvement in their child(s) and partners' lives by providing services intended to improve parenting skills, increase awareness of child development, and improve relationships with their partner and children—all beginning in the prenatal period.

DAD Project home visitors partner with fathers to complete individualized, strengths-based care plans, and track progress towards participant-driven goals. Case management services provided include mental health screenings; referrals for mental health consultation, education, employment, financial and legal services; and facilitating access to health services. Home visitors also provide fatherhood coaching and support fathers in co-parenting with the child's mother.

The DAD Project adheres to the Parents as Teachers (PAT) evidence-based home visiting model that is compliant with Federal (HRSA) MIECHV (Maternal, Infant, and Early Childhood Home Visiting Program) and utilizes the PAT child development and parenting curriculum. The program is focused on child engagement and helps connect dads to the MHD and community resources. In addition, the program employs the 24/7 Dad curriculum, a comprehensive fatherhood curriculum developed by the National Fatherhood Initiative.

PROGRAM OPERATIONS

Branch & Division:	Community Health: Maternal and Child Health
Established:	2013
2019 Expenses:	
O&M Expenses:	\$154,296
Grant Expenses:	\$369,283

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period			
Family Foundations in Home Visitation (FFHV)*	State of WI-Department of Children & Families	10/1/19- 9/30/20	\$1,377,170			
City Match-Home Visiting (O&M)*	O&M City Match (Requirement)	10/1/19- 9/30/20	\$631,510			
*Grant supports more than one MHD program or initiative						

PERFORMANCE MEASURES

External referral sources include, but are not limited to: AIDS Resource Center of Wisconsin, Children's Hospital of Wisconsin, and Milwaukee Public Schools.

Measure	2015	2016	2017	2018	2019*
# of referrals received by DAD Project	105	57	50	83	51
# of successful face-to-face visits by DAD Project staff	764	468	369	430	198
# of newly enrolled families	2	24	21	46	21
# of families enrolled in program (cumulative)	3	27	41	64	44
# of caregivers enrolled	3	27	41	64	44
# of children enrolled	3	28	38	53	37
Total # of clients served	61	56	41	56	81
# of families who left through attrition (did not complete full program)	19	20	15	17	30
# of families who completed program	5	11	4	5	2
% of primary caregivers screened for depression within 3 months of enrollment (if not enrolled prenatally) or within 3 months of delivery (if enrolled prenatally)	0	5.9	76.9	70.8	76.9
% of children who received the last recommended visit based on the American Academy of Pediatrics schedule			100	88.0	88.2
% of primary caregivers who reported using tobacco at enrollment and were referred to tobacco cessation counseling/services within 3 months of enrollment			0	12.5	0
# of ASQ-3 screenings completed	9	13	10	12	14
# of primary caregivers who receive an observation of caregiver-child interaction by the home visitor using a validated tool			1	13	10

^{*}New data reporting system migration shifted metrics reporting

PERFORMANCE MEASURES, Continued

Measure	2015	2016	2017	2018	2019
% of children screened who need monitoring			0	26.7	21.4
% of children screened who need a referral			20	0	0
# of father group meetings	1	2	2	9	2
# of primary caregivers who are screened for intimate partner violence (IPV) within 6 months of enrollment using a validated tool			1	11	7
% of primary caregivers with positive screens for intimate partner violence (IPV) who receive referral information to IPV resources			0% screened positive	0% screened positive	0% screened positive
# of primary caregivers who had continuous health insurance coverage for at least 6 consecutive months		15	7	9	13

2019 KEY ACCOMPLISHMENTS

- 1. DAD Project began partnership with Children's Hospital of Wisconsin via the Health Start Grant and began building the infrastructure of engaging fathers into services between MHD and CHW that best meet their needs.
- 2. Restructured the leadership of the program to incorporate a supervisor position—filled via promotion—and a Program Manager that oversees both EFM and DAD Project for better continuity, support and collaboration across sibling programs.
- 3. DAD Project continues to establish partnerships to increase Fatherhood groups, referral sources, and outreach opportunities including but not limited to Next Door Foundation, Parenting Network, MPS and more!

2019 KEY CHALLENGES

- 1. Discontinuation of Men's Health Services at MHD that impacts health services for men DAD Project serves. There is a need to become integrated in initiatives/servicing for Men's Health with MHD—to not only provide support for men as fathers but support for their own physical, emotional and mental health care needs.
- 2. To have established referral sources and increased awareness of Home Visitation for fathers—normalizing the necessity and positive impact of such services in the community.
- 3. For the program to continue improving their compliance of federal, state and model benchmarks—subsequently increasing the chances of increased grant funding and opportunities for programmatic growth.
- 4. Salary inequity: To have the Health Project Assistant positions reclassed to parallel other home visitation salary ranges.



Empowering Families of Milwaukee

The Empowering Families of Milwaukee (EFM) program serves high-risk pregnant women (or women with children less than 60 days of age) who reside in the City of Milwaukee. Milwaukee has high racial disparities in infant mortality and healthy birth outcomes. Nearly half of all children in Milwaukee live in poverty, leaving Milwaukee's families at risk for poor prenatal, birth, infant, and child development outcomes. MHD developed strategic community partnerships and programs like EFM that target clients in communities with high rates of infant mortality, racial disparities in birth outcomes, lower income and educational attainment, and the multitude of contributing risk factors to the safety and health of babies.

EFM is an HFA (Healthy Families of America) Accredited site and has been a funded home visitation program through the Wisconsin Department of Children and Families (DCF) since 2005. EFM applies evidence-based models to improve birth outcomes, enhance family functioning, prevent child abuse and neglect, and support child health, safety, and development. The program collaborates with community partners to facilitate access to health, social, and child development support for families.

All EFM home visitors provide intensive, in-person home visits to families; enrolling them during pregnancy whenever possible, and families can remain in the program until the child turns three years of age. EFM utilizes a unique, multi-disciplinary dyad approach to effectively serve enrolled families. Each dyad consists of a public health nurse and a public health social worker. The public health nurses focus on the health and medical needs of families while the social worker focus on the psychosocial needs of families. EFM has the capacity to serve approximately 130 families per year when fully staffed (7 dyads).

PROGRAM OPERATIONS

Branch & Division:	Community Health: Maternal and Child Health
Established:	2006
2019 Expenses:	
O&M Expenses:	\$462,140
Grant Expenses:	\$1,107,850

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
Family Foundations in Home Visitation (FFHV)*	State of WI-Department of Children & Families	10/1/19- 9/30/20	\$1,377,170
City Match-Home Visiting (O&M)*	O&M City Match (Requirement)	10/1/19- 9/30/20	\$631,510
*Grant supports more than one MHD prop	gram or initiative		

PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019*
# of referrals received	150	68	46	143	191
# of newly enrolled families	74	45	18	66	76
# of caregivers enrolled	75	112	122	124	151
New clients enrolled prenatally	69	42	17	41	51
Clients enrolled in 1 st trimester	6	1	0	0	3
Clients enrolled in 2 nd trimester	22	20	3	20	20
Clients enrolled in 3 rd trimester	41	21	14	21	37
# of children enrolled	69	119	146	130	147
# of successful face-to-face visits made by EFM Project staff	3620	3743	2708	2769	1921
# of unsuccessful (no response) home visits attempted	350	363	222	94	
Families who left through attrition (did not complete program)	41	34	27	44	37
Families who successfully completed the program	37	22	13	42	19
% of infants (among mothers who enrolled prenatally before 37 weeks) who are born preterm following program enrollment		0	27.8	14.3	4.5
% of infants (among mothers who enrolled prenatally) who were breastfed any amount at 6 months of age		15.4	35.3	16.7	34.5
% of primary caregivers screened for depression within 3 months of enrollment (if not enrolled prenatally) or within 3 months of delivery (if enrolled prenatally)	0	3.9	67.7	53.8	52.1
% of children who received the last recommended visit based on the American Academy of Pediatrics schedule *New data reporting system migration shifted met		65.3	64.7	80.2	90.3

^{*}New data reporting system migration shifted metrics reporting

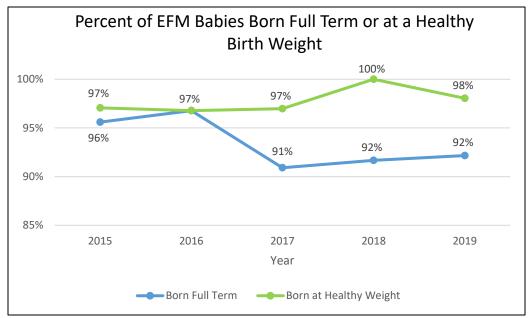
PERFORMANCE MEASURES, Continued

Measure	2015	2016	2017	2018	2019*
% of mothers enrolled prenatally or within 30 days after delivery who received a postpartum visit with a healthcare provider within 8 weeks of delivery	0	0	53.3	52.9	73.0
% of primary caregivers who reported using tobacco at enrollment and were referred to tobacco cessation counseling/services within 3 months of enrollment			0	0	28.6
# of mental health screenings for depression for mothers each month (Edinburgh Postnatal Depression Scale (EPDS)	141	105	81	70	93
% of infants that are always placed to sleep on their backs, without bed-sharing or softbedding	NA	8.21	62.65	52.23	66.23
% of children who were breastfed any amount since birth	NA	2.51	22.11	17.18	24.8
% of primary caregivers who receive an observation of caregiver-child interaction by the home visitor using a validated tool		43	104	96	74
# of ASQ-3 screenings completed	NA	54	190	142	100
% of children screened who need monitoring		57.4	51.6	50.0	33.0
% of children screened who need a referral		13.0	22.1	19.0	18
% of primary caregivers who are screened for interpersonal violence within 6 months of enrollment using a validated tool		5	28	32	66
% of primary caregivers with positive screens for intimate partner violence (IPV) who receive referral information to IPV resources		100	100	100	100
% of primary caregivers who had continuous health insurance coverage for at least 6 consecutive months		90	52	67	88

The Ages and Stages Questionnaires (ASQ) is a developmental screening that helps identify potential delays. Children with development delays are connected with appropriate services by program staff.

^{*}New data reporting system migration shifted metrics reporting

PROGRAM HEALTH OUTCOMES



Full term: ≥ 37 weeks gestation, Healthy weight: ≥ 2500 grams

Denominator = # of singleton live births in 2019 among EFM babies enrolled prenatally

2019 KEY ACCOMPLISHMENTS

- 1. In 2019 EFM was able to gain about \$100,000 back from their grant that was cut in 2018 due to good performance and diligent work to meet State benchmarks.
- 2. The Public Health Social Worker positions underwent a market study with DER and were reclassed into a higher, more equitable pay range—aiding in the issues of retention and creating more competitive and livable wages for the hard work they do!
- 3. EFM tripled the number of families in outreach and have been working diligently to reach as many pregnant mothers as possible in the City of Milwaukee.

2019 KEY CHALLENGES

- 1. There is a great amount of work that needs to go into establishing the program's transition to the Parents As Teachers evidence-based model.
- 2. There is a need to continue to increase the program's capacity of families served to meet grantor's expectations—subsequently regaining more grant money towards the program.
- 3. Increasing staff retention to best meet grant objectives and reach as many families as possible
- 4. Slow hiring processes/reclassification processes impeding on ability to revise/recruit for the EFM Supervisor position (0.6FTE to 1.0FTE)



Infant Mortality Special Initiatives

Cribs for Kids

The City of Milwaukee Health Department became an official Cribs for Kids program site in 2009. The program provides families in need of a crib education on how to create a safe sleeping environment for their babies along with a free Graco Pack'n Play (PnP) portable crib. Families are also provided with crib sheets and a sleep sack and are taught how to properly secure the sheets to reduce sleeping hazards. The MHD conducts three clinics a week.

The Cribs for Kids program receives nearly one thousand referrals from a number of MHD programs and community partners to identify families in need of a safe place for their baby to sleep. Additionally, the program provides trainings and presentations for various agencies on infant mortality and safe sleep practices. As a result, these agencies can provide safe sleep education to the families they serve.

Strong Baby Title V Program

The Strong Baby Title V Program provides training, education, and informs practice on six focus areas — Safe Sleep, Breastfeeding, Developmental Screening, Healthy Equity, Perinatal Depression and Adolescent Suicide. Program targets relevant entities to build their awareness and practice in these areas. This is including, but not limited to, providing community groups, outreach/educational events, collaborating with health care providers, childcare providers, schools, and community organizations that impact children and families in Milwaukee.

The Strong Baby program has been staffed in most areas for late 2019-early 2020. The grant was not revised/completed until 2019. Data for this program is most consistent effective January 2020 and will be included in the 2020 Annual Report.

PROGRAM OPERATIONS

Branch & Division:	nch & Division: Community Health: Maternal and Child Health			
Established:	2009 (Cribs for Kids); 2015 (Strong Baby)			
2019 Expenses:				
O&M Expenses:	\$100,265			
Grant Expenses:	\$0			

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
Maternal and Child Health	State of Wisconsin, Consolidated Contract	1/1/19- 12/31/19	\$446,614
City Match-MCH (O&M) (75% Required Match)	O&M City Match	1/1/19- 12/31/19	\$334,961

PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019		
Cribs for Kids	Cribs for Kids						
# of referrals to Cribs for Kids/Safe Sleep Clinic			946	909			
# of families that met eligibility requirements and were registered for Safe Sleep Clinic			808	695			
# of participants					587		
# cribs distributed	806	809	756	651	611		
# of families that completed safe sleep education and received PnPs at Safe Sleep Clinic	806	809	640	602	519		
# of families enrolled in home visitation program and received education and PnP in home			96	49	92		
# of safe sleep training sessions					869		
% of cribs distributed in ZIP Codes with a high prevalence of infant mortality			78.9%	79.3%	78%		

2019 KEY ACCOMPLISHMENTS

- 1. Partnering with community partners such as African American Breastfeeding Network (AABN), Libraries, Headstart organizations, MPS schools, etc.
- 2. Grant objectives were still being carried out by the existing staff despite the Program Manager position being vacant until April 2020 speaking to their autonomy, initiative and resilience.

2019 KEY CHALLENGES

- 1. There was confusion among staff on what the grant objectives and requirements were without having a Program Manager.
- 2. There is concern that as of 2021 Safe Sleep will not be an objective of the Title V grant anymore which means restructuring what Safe Sleep will look like outside of the grant (as Cribs 4 Kids existed prior to the Strong Baby grant)



Birth Outcomes Made Better (BOMB) Doula Program

The Birth Outcomes Made Better (BOMB) Doula Program was created to support healthy pregnancies and nurture healthy babies in the City of Milwaukee. Through doula services families will have the support and education necessary for a healthy pregnancy and beyond. The program works with birthing people prenatally at any stage of pregnancy through birth and 12 weeks postpartum, with a focus on the 53206 zip code. *This program was created in late 2019 and services are expected to launch in late 2020.*

What is a Doula?

Doulas are trained professionals who provide non-clinical emotional, physical and informational support for birthing people, before, during and after labor and birth. During the prenatal period doulas share resources and information about the labor process, facilitate positive communication and self-advocacy. During labor and birth doulas provide hands-on comfort measures to assist with pain management. Doulas also provide post-partum support to help with transitions into parenting, breastfeeding, etc.

Primary Objectives:

- 1. Improve maternal and infant mortality rates for enrolled mothers
- 2. Diversifying mothers' options to pregnancy support through Doulas
- 3. Increase breastfeeding education and initiation rates for mothers
- 4. Connection to routine prenatal and post-partum cares and health benefits
- 5. Support pathways to socioeconomic stability
- 6. Support and educate partners/fathers alongside mothers during pregnancy
- 7. Increase engagement with healthy behaviors (i.e. mental health, prenatal visits, exercise, smoking cessation, safe sleep practices, etc.).
- 8. Reproductive Life and Birth Planning

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
BOMB Doula funding (not grant funded)	City of Milwaukee O&M	10/1/2019- 12/31/2020	\$240,000
Department of Health & Human Services County Grant	Department of Health & Human Services – Milwaukee County	10/1/2019- 12/31/2021	\$52,000

2019 KEY ACCOMPLISHMENTS

- 1. Creation of the program in late 2019
- 2. Community organizations and hospital systems are optimistic about doula care

2019 KEY CHALLENGES

- Doula Coordinator position has yet been filled, which is needed to support launch of Doula servicing
- 2. No referral system or client intake platform yet established

Parents Nurturing and Caring for their Children

Parents Nurturing and Caring for their Children (PNCC) is a home visiting program aimed at helping pregnant women and their families access medical, social, educational and other needed services during the prenatal period as an intervention to promote a healthy pregnancy.

PNCC services are provided voluntarily during pregnancy and for the first 60 days following delivery. Services include outreach, health assessments and information, care plan development and goal setting, advocacy, ongoing care coordination and health education and nutritional counseling. All Medicaid eligible pregnant women who are interested in learning more about having a healthy baby are eligible to participate in PNCC. This program serves the City of Milwaukee residents.

Newborn Screening

The City of Milwaukee Health Department has two Newborn Screening programs to identify conditions in newborns that affect the outcome of their health and development. The first program is the Newborn Hearing program which aims to identify hearing impairment early to provide timely intervention in order to ensure children reach their highest potential. The Public Health Nurse Coordinator (PHNC) for the Newborn Hearing Program covers the Southeast region of Wisconsin which accounts for half of all the babies diagnosed with permanent hearing impairment. The PHNC case manages and screens newborns that are born in the home, failed their first newborn hearing screen, left the hospital without a screen, or are lost to follow-up with their primary care physician. If an infant is found with any degree of hearing impairment, the PHNC ensures that a referral is made to an early intervention program like Children's Hospital.

The second program is the Newborn Screening program which uses blood from a heel prick to identify 44 different genetic, endocrine and metabolic disorders. If these are not diagnosed in a timely manner, they could lead to cognitive delays, brain damage, illness or death. The PHNC performs some blood draws on newborns that were not screened before they left the hospital, but the majority of the screens are for newborns that need retesting. More specifically, a retest is completed when there was a problem with the way the first blood sample was collected or the test result was abnormal. The PHNC will also do confirmatory whole blood draws on newborns suspected of having a sickling disorder. In addition, the PHNC case manages newborns diagnosed with sickle cell disorder, hypothyroidism, and cystic fibrosis. The case managers ensure that newborns are connected with specialty clinics and that parents are educated on the complexities of the diagnosis.

PROGRAM OPERATIONS

Branch & Division:	Community Health: Maternal and Child Health
Established:	PNCC-2009 NBS-1993 NBH-2010
2019 Expenses:	
O&M Expenses:	\$410,485
Grant Expenses:	\$144,008

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period			
Universal Newborn Hearing Screening	State of Wisconsin, Department of Health Services	4/1/19- 3/31/20*	\$42,600			
Newborn Hearing Screening Grant	State of Wisconsin, Department of Health Services	4/1/19- 3/31/20*	\$24,400			
Congenital Disorders	State of Wisconsin, Department of Health Services	7/1/19- 6/30/20*	\$142,026			
* Changed as of January 2020 to the 1/1/20-12/31/20 grant cycle						

PERFORMANCE MEASURES - PNCC

Measure	2015	2016	2017	2018	2019
# of new referrals received	49	106	88	102	133
% of families and clients who were referred and then enrolled	38.8%	54.7%	55.7%	45.1%	37.6%
# of new clients enrolled	19	58	49	46	50
# of clients who successfully completed program	21	33	20	25	26
# of infants enrolled in PNCC born before 37 weeks	1	3	2	1	6
% of infants enrolled in PNCC born before 37 weeks	2.9%	6.1%	5.7%	29.4%	14.63%
# of mothers in PNCC who initiated breastfeeding	26	39	25	21	35
% of mothers in PNCC who initiated breastfeeding	76.4%	79.5%	71.4%	61.7%	85%
# of ASQ screenings completed for families enrolled				117	25
# of mental health screenings for depression for mothers (Edinburgh Postnatal Depression Scale (EPDS))				162	73
# of referrals to mental health services (based on EPDS score and/or other referrals made for mental health services, e.g., anxiety)				7	4
% of families referred and connected to additional care based on EPDSs Screenings					5%

The Ages and Stages Questionnaires (ASQ) is a developmental screening that helps identify potential delays. Children with development delays are connected with appropriate services by program staff.

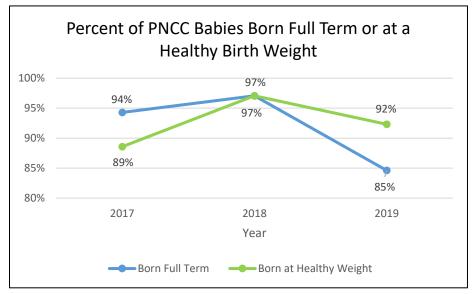
PERFORMANCE MEASURES - Newborn Screening

Measure	2015	2016	2017	2018	2019	
Newborn Hearing Screen						
# of referrals received	70	117	171	347	415	
Average # of babies case managed per month		68	70	119	135	
# of babies screened	34	49	43	37	56	
# of babies with confirmed hearing loss	3	5	3	32	29	
Newborn Screening (Congenital Disorder	rs)					
# of NBS referrals received from the newborn screening	66	68	88	109	103	
# of infants identified with sickle cell through NBS and were case managed	19	19	18	17	12	
# of infants identified with cystic fibrosis through NBS and were case managed	4	2	3	14	2	
% of infants that were triaged within 2 days of receiving referral (goal 95%)				97.9%		
% of infants identified with a sickling disorder on newborn screening seen at CHW by four months of age (goal 95%)	100%	100%	100%	100%	100%	

The number of referrals received increased by 20% from 2018 to 2019.

This number can fluctuate year to year. It depends on the number of cases who missed their initial hearing screening. All babies that were screened were successfully case-managed and provided access to appropriate care.

PROGRAM HEALTH OUTCOMES



Full term: ≥ 37 weeks gestation, Healthy weight: ≥ 2500 grams

Denominator = # of singleton live births in 2019 among PNCC babies enrolled prenatally

Change in metric tracking – numbers prior to 2017 cannot be directly compared

2019 KEY ACCOMPLISHMENTS

- PHN Coordinator created and implemented tools to improve the structure and organization of Congenital Disorders program i.e. electronic case list, supplies organizer, drying containers for NBS cards, etc.
- 2. On-boarding new PHN Coordinator without any disruption to service. New PHN Coordinator is now running the program and PHN Coordinator Ka is available as backup when needed (vacation/sick time).
- 3. Onboarding a program supervisor and a public health nurse as well as a clinic assistant so that the prenatal care coordination program can have guidance, deliver services and intake referrals in an appropriate time frame, and better continuity of care for mothers in the program.
- 4. Partnering with Cribs for kids/Pack and Play to deliver safe sleep education and a pack n play for mother and child in the PNCC program.
- 5. Assigning a BackUp/Support person for NBS to continue when main person is sick/unavailable.

2019 KEY CHALLENGES

- 1. The handbook for this program is not up to date and there is no electronic version.
- 2. Public Health Nurse Career Ladder PHNCL growth from PHN level 1 or 2 to PNH 2 or 3 being held by DER/HR
- 3. The PHNCL itself needs to be edited as it is time consuming on both the PHN and Supervisor end.
- 4. Not having an onsite Karen or Rohingya translator as the refugee population grows and is coming in for WIC, Pack n Play, and other services at SSHC.



Women, Infants, and Children Nutrition

The City of Milwaukee Health Department Women, Infants, and Children (WIC) program promotes and maintains the health and well-being of nutritionally at-risk pregnant, breastfeeding, and postpartum women, infants, and children up to age five. The four main goals of the program are to provide nutrition education, breastfeeding education & support, supplemental nutritious foods, and community referrals to its participants.

In addition to prescribing specifically tailored monthly food packages to participants, an added seasonal benefit is the Farmer's Market Nutrition Program (FMNP), which provides \$24 in vouchers to spend at local farmer's markets. Additionally, the MHD WIC Program also seeks to coordinate additional services that parallel other public health priorities, such as educating families on healthy birth spacing and providing blood lead testing to children.

The MHD WIC program aims to serve at least 97% of its monthly contracted caseload of approximately 7,361 participants. Geographically, the MHD WIC program operates at all three health department locations targeting participants in the central, northwest, and southern urban areas of Milwaukee.

PROGRAM OPERATIONS

Branch & Division: Community Health: Maternal and Child Health				
Established:	1981			
2019 Expenses:				
O&M Expenses:	\$12,846			
Grant Expenses:	\$1,268,890			

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period	
WIC Operations	State of Wisconsin, Department of Health Services	1/1/19- 12/31/19	\$1,277,625	
WIC-Farmer's Market	State of Wisconsin, Department of Health Services 1/1/19 12/31/		\$7,500	
WIC-Fit Families Grant	State of Wisconsin, Department of Health Services	10/1/19- 9/30/20	\$31,675	
WIC Infrastructure	State of Wisconsin, Department of Health Services	10/1/19- 9/30/20	\$6,000	

PERFORMANCE MEASURES

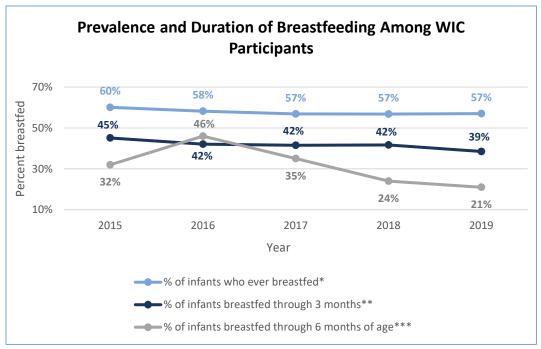
Measure	2015	2016	2017	2018	2019
# of participants	89093	85375	86515	88197	86053
# of nutritional lessons provided to participants	5242	4527	5075	5441	6025
# of referrals	533	633	722	1155	3412
# of "voluntary" lead screens for children enrolled in WIC	3861	3706	3124	3278	3028
# of lead water filters distributed	N/A	N/A	549	209	87
# of WIC benefits distributed (Dollar Amounts Redeemed)	\$3,582,190	\$3,630,687	\$3,778,555	\$3,823,696	\$3,386,350
% of Farmers Market vouchers used of those distributed (Total Checks/Dollar Amount Used)	49%	42%	40%	40%	40%
% of Farmers Market vouchers used of those distributed (Some of All of Checks/Dollar Amount Used)	88%	84%	87%	83%	83%
# of infants enrolled in WIC who ever breastfed	1,210	1,204	1,211	1,219	1,217
% of infants enrolled in WIC who ever breastfed ¹	60.1%	58.2%	56.9%	56.8%	57%
# of infants breastfed through 3 months ²	229	209	213	212	226
% of infants breastfed through 3 months ³	45.1%	42.1	41.5%	41.7%	38.5%
# of infants enrolled in WIC who exclusively breastfed at 3 months ⁴	56	56	67	58	69
% of infants enrolled in WIC who exclusively breastfed at 3 months ⁵	13.8%	15.3%	17.4%	15.1%	15.4%

In 2015, WIC transitioned from paper benefit checks to EBT (eWIC).

- [1] Denominator is the total number of infants on WIC born during the same period.
- [2] This includes all infants who reached the age of 3 months within the year, and had breastfeeding documented as "Yes" at the time they turned 3 months. It also includes infants who BF past 3 months of age.
- [3] Denominator is all infants on WIC who turned 3 months during the year
- [4] This includes all infants who reached the age of 3 months of age within the year, and were documented as exclusively BF at 3 months of age. It also includes those infants who exclusively BF past 3 months of age
- [5] Denominator is all infants on WIC who turned 3 months during the year and ever breastfed



PROGRAM HEALTH OUTCOMES



^{*}Denominator is the total number of infants on WIC born during the same period.

2019 KEY ACCOMPLISHMENTS

- 1. Newly formed partnership between City of Milwaukee Health Department WIC and Ascension St. Joseph's Hospital to enroll participants and provide program outreach, in particular to high-risk pregnant women (April 2019)
- 2. Highest ever attendance at our WIC Summer Celebration 665+ for our 2-hour event. This was more than double our attendance from years' past (July 2019)
- Significant increase in caseload & funding due to increased service provision in the past year,
 2019 caseload = 7,489, 2020 caseload = 7,910

2019 KEY CHALLENGES

1. Staff turnover, mainly as a result of retirements, coupled with lengthened recruitment processes to fill vacancies; such long-term vacancies can create burnout and decrease morale among existing staff

^{**}Denominator is all infants on WIC who turned 3 months during the year

^{***}Denominator is all infants on WIC who turned 6 months during the year

Community Health

Maternal and Child Health

Office of Violence Prevention

Environmental Health

Consumer Environmental Health

Home Environmental Health

Emergency Preparedness & Environmental Health

Medical Services

Clinical Operations

Laboratory Services

Policy, Innovation, and Engagement

Office of Violence Prevention





The Office of Violence Prevention (OVP) advances strategies through partnerships that strengthen youth, families, and neighborhoods. Community-wide prevention is the most effective, long-term solution to violence, and OVP facilitates multidisciplinary, population-level approaches to influence the social, behavioral, and environmental factors that contribute to violence. OVP brings together agencies, experts, and community resources on efforts that reduce domestic and intimate partner violence, sexual assault, child abuse, human trafficking, children witness to violence, gun violence, interpersonal violence, intentional injury, homicide, and more. Current initiatives include:

Blueprint for Peace: The Blueprint for Peace is Milwaukee's comprehensive violence prevention strategy. The Blueprint planning process was completed in Fall 2017. The six goals and thirty strategies contained in the Blueprint were informed by the input of over 1,500 Milwaukee residents, including youth. Ongoing work tracks implementation and impact.

ReCast Milwaukee: ReCAST MKE is a five-year effort funded in 2016 by the federal Substance Abuse and Mental Health Services Administration to promote healing and restorative practices among youth ages 12-24, and their families. It aims to reduce the impact of trauma in Milwaukee by enhancing individual and community resilience, building the capacity of organizations to have healing focused care practices, and strengthening collaboration between institutions and community.

Commission on Domestic Violence and Sexual Assault: The Commission on Domestic Violence and Sexual Assault is one of the oldest commissions in the country established by city ordinance. It is comprised of domestic violence and sexual assault survivors, prevention advocates, service providers, and system partners including criminal justice, law enforcement, and corrections. The Commission focuses on improving the collaboration between system and community partners, and advocates for polices that enhance prevention and protect survivors.

Safe Visitation and Exchange: The Safe Visitation and Exchange Center is a partnership between OVP, Children's Hospital, Legal Action, and Sojourner Family Peace Center. The center provides a safe space for families impacted by domestic violence to conduct supervised visitation and exchanges of children. The program is funded by a Justice for Families Grant through the U.S. Department of Justice.

Trauma Response Initiative: The Trauma Response Initiative links children who have been exposed to trauma or violence with beneficial resources. The Trauma Response Team provides support and guidance for children and families and may recommend additional services such as counseling or therapy. In addition to OVP's role, its partnerships include Milwaukee County Children's Mobile Crisis, the Milwaukee Police Department, and the Milwaukee Fire Department.

414Life: 414Life is a program that uses a public health approach to preventing violence. This program is modeled after Cure Violence, a successful violence prevention effort implemented in multiple cities around the world. The model engages credible messengers from the community to engage in prevention-based outreach and targeted conflict mediation. The program's outreach workers interrupt and prevent violence in targeted neighborhoods while spreading conflict mediation skills. Through this partnership with local hospitals, the team will be trained to provide support to families, friends, and survivors of gun violence in local hospitals and the surrounding communities.

Community Engagement: OVP has hosted or sponsored more than two dozen community events and presentations focused on violence prevention and healing.

Coaching Boys to Men: This program engages athletic coaches in presenting a sexual assault prevention curriculum to student athletes.

PROGRAM OPERATIONS

Branch & Division:	Community Health: Office of Violence Prevention
Established:	2008
2019 Expenses:	
O&M Expenses:	\$1,142,757
Grant Expenses:	\$1,394,976
2019 Staffing:	
O&M FTE:	4.37
Grant FTE:	3.63
Total FTE:	8.0

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
Justice for Families	US Department of Justice	10/1/16- 9/30/19	\$600,000
Justice for Families	US Department of Justice	10/1/19- 9/30/22	\$550,000
ReCast Milwaukee Project	Substance Abuse and Mental Health Services Administration	10/1/19- 9/30/20	\$1,000,000

PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019
Community Engagement					
# of community engagement events and briefings		3	21	28	24
# of copies of Blueprint for Peace distributed			500	400	3250
# of Facebook followers (cumulative)			828	1699	5513
Average # of individuals engaging with OVP's Facebook page			1371	4032	Unavailable
# of 414Life webpage views				7824	14034
# of OVP webpage unique pageviews					16641
# of individuals engaged					606
Trauma Response Initiative					
# of referrals received	86	223	236	327	466
# of families engaged		179	212	182	272
Safe Visitation and Exchange					
# of families served	59	53	74	60	70
# of supervised exchange services provided	260	713	404	386	637
# of one-to-one supervision services provided	404	524	352	348	762
414Life Violence Interruption					
# of violence interruptions				14	67
# of participants				16	56
Commission on Domestic Violence and S	Sexual Assau	ılt			
# of agencies and organizations engaged	59	60	58	72	85
# of Commission meetings	12	12	10	11	11
Completed training for current officers/recruits of MPD	Yes	Yes	Yes	Yes	Yes
# of community engagement efforts/events	24	25	22	26	42

62% of referrals resulted in successful contact and service provisions to children and families. This was a 50% increase from 2018.

Families engaged include families that a counselor made contact with through phone calls or home visits.

Program started Nov. 2018, so 2018 figures reflect two months of service.

PERFORMANCE MEASURES, Continued

Measure	2015	2016	2017	2018	2019		
Coaching Boys to Men							
# of coaches				23	23		
# of student athletes				180	180		
ReCAST MKE							
# of youth served			189	2,063	4,578		
# of adults trained				306	403		
# of organizations receiving funding or subcontracts			6	49	29		

Program started Nov. 2018, so 2018 figures reflect two months of service.

2019 KEY ACCOMPLISHMENTS

- 1. Increased community awareness and engagement related to the Blueprint for Peace
- 2. Testified to the U.S. Congress Judiciary Subcommittee on Crime, Terrorism and Homeland Security regarding the City of Milwaukee's efforts to prevent and reduce gun violence
- Launched 414 LIFE partnership with Froedtert Hospital and Ascension to support gun-shot survivors
- 4. Expanded community referrals for Trauma Response Program
- 5. Hosted Mother's March Against Violence
- 6. Hosted Milwaukee's first annual Love Without Violence Conference
- 7. Increased youth and families served through ReCast Milwaukee Initiative
- 8. Received national BUILD Sherman Park Grant in partnership with United Way, Ascension, and Sherman Park Community Association

2019 KEY CHALLENGES

- 1. Loss of office space and community presence at the UWM Joseph J. Zilber School of Public Health
- 2. Challenges associated with hiring three new staff members
- 3. Loss of Data and Evaluation Coordinator

Community Health

Maternal and Child Health

Office of Violence Prevention

Environmental Health

Consumer Environmental Health

Home Environmental Health Emergency Preparedness & Environmental Health

- Medical Services

 Clinical Operations

 Laboratory Services
- Policy, Innovation, and Engagement

Q Consumer Environmental Health

The City of Milwaukee Health Department works to promote safe food preparation and service, safe tattooing and body art practices, and protect consumers from fraudulent practices in commercial transactions involving determinations of quantity through its Food Inspection, Tattoo and Body Art Inspection, and Weights & Measures programs.

Each year, the Food Inspection Program conducts annual and periodic inspections of the nearly 3,000 food service establishments along with more than 650 mobile vendors and temporary events such as neighborhood and citywide festivals. Along with regulating establishments, specialists provide training to food service managers on safety and sanitation, investigate complaints and illnesses associated with establishments, review plans and conduct pre-occupancy inspections of new or remodeled establishments, provide food and safety consultations, and develop and implement policies to support food safety.

In 2019, the program continued regular and required inspections and services while joining the City Development Center in reviewing plants for food establishments regulated by the MHD, assisting walk-in customers, and coordinating with other City departments to support food establishment operators in the city.

Along with the prevention of foodborne illness, inspectors work to decrease the risk of blood-borne diseases such as Hepatitis B, Hepatitis C, or HIV from tattoo or body art practices by conducting inspections to assure that tattoo, permanent makeup, and/or body piercings are done in a sanitary and sterile manner. MHD's Weights & Measures Program also works to protect Milwaukee consumers' pocketbooks by monitoring retail businesses to assure that devices such as scales and scanners are accurately determining the price of goods sold by weight.

PROGRAM OPERATIONS

Branch & Division:	Environmental Health: Consumer Environmental Health
Established:	Food inspections began in 1980, Consumer Environmental Health
	formed in 2012
2019 Expenses:	
O&M Expenses:	\$2,035,808
Grant Expenses:	\$69,186
2019 Staffing:	
O&M FTE:	26.75
Grant FTE:	0.25
Total FTE:	27.0

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
FDA Retail Program Standards Grant	US Food and Drug Administration (FDA)	7/1/18- 6/30/19	\$70,000
FDA Retail Program Standards Grant	US Food and Drug Administration (FDA)	7/1/19- 6/30/20	\$70,000

PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019
Food Inspection					
Routine inspections	6,770	5,963	3,626	2,697	2,633
Percent of routine inspections with one or more critical violations	25%	31%	34%	41%	42%
30 day inspections				357	318
Pre-inspections				537	430
Consultations				647	325
Complaints	1,013	598	577	701	829
Revenue generated (food only)	\$2,390,020	\$2,508,788	\$2,499,221	\$2,199,443	\$2,109,897
Food Sampling					
Number of samples tested	613	337	144	468	On hold in 2019
Violation rate	14%	25%	19%	14%	-
Temporary Events					
Number of inspections			615	603	532
Number of priority violations			207	182	88
Mobile Restaurants					
Number of mobile inspections	658	463	322	315	530
Percent of occurrences with a priority violation	15%	17%	15%	34%	32%
Food Safety Education & Outreach					
Number of operator training sessions performed	207	189	341	381	325
Number of food handlers trained	1,362	1,235	1,463	1,378	1,312
Tattoo & Body Art					
Number of tattoo/body art inspections	113	104	186	215	50
Number of violations	281	129	107	56	56
Revenue generated (tattoo & body art licenses)		\$11,031	\$14,718	\$19,009	\$13,569
Weights & Measures					
Number of devices or inspections tested	7,780	8,259	1,505	1,081	865
Revenue generated		\$403,271	\$388,827	\$429,080	\$337,452

Critical violations continued to increase as a result of changes to data collection. The new software more accurately captures violations.

Sterilization-related violations continue to decrease as the tattoo and body art industry has transitioned to presterilized, disposable needles and ink tubes.

Due to changes in compliance software, data collected is per inspection vs per device.

Population Health Outcomes

Cases Reported	2015	2016	2017	2018	2019	Three Year Average	Estimated # of Cases Per Case Reported*	Total Estimated Cases 2019	Total Estimated Cases Three Year Average
Campylobacter	49	45	62	58	99	73	30	2970	2263
E. coli 0157	7	16	7	14	13	11	26	338	309
Listeria	3	1	1	0	0	0	2	0	1
Salmonella	78	77	75	99	75	83	29	2175	2490
Vibrio	1	1	4	0	1	2	142	142	238
Yersinia	1	1	2	1	0	1	123	0	124

City of Milwaukee enteric disease cases from Wisconsin Electronic Disease Surveillance System on January 6, 2020. Please note that data are provisional and subject to change.

^{*}FoodNet Progress Report https://www.cdc.gov/features/dsfoodnet2012/food-safety-progress-report-2012-508c.pdf

Incidence per 100,000 ¹	2015	2016	2017	2018	2019	Three Year Average	Healthy People 2020 Target ²	Healthy People 2020 Status ³ (met or not met)
Campylobacter	8.1	7.6	10.4	9.8	16.6	12.3	8.5	Not met
E. coli 0157	1.3	2.7	1.2	2.4	2.2	1.9	0.6	Not met
Listeria	0.5	0.2	0.2	0.0	0.0	0.1	0.2	Met
Salmonella	12.9	12.9	12.6	16.6	12.6	14.0	11.4	Not met
Vibrio	0.2	0.2	0.7	0.0	0.2	0.3	0.2	Not met
Yersinia	0.2	0.2	0.3	0.2	0.0	0.2	0.3	Met

^[1] Incidence calculated using 2010 U.S. Census Population data.

^[2] Food Safety, Healthy People 2020 http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=14

^[3] Based on comparison between 2019 City of Milwaukee incidence with 2020 target.

2019 KEY ACCOMPLISHMENTS

Retail food program:

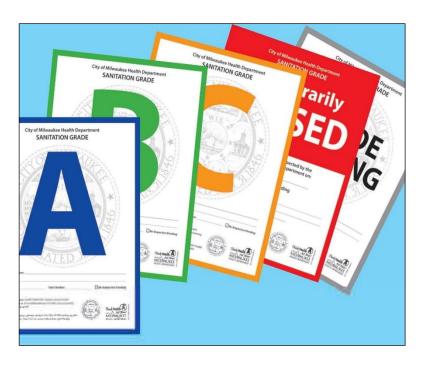
- 1. Advanced Conformance with the FDA Standards: The only jurisdiction in Wisconsin to meet Standard 2
- 2. Implemented Compliance Conferences to support operators with greater compliance needs
- 3. Implemented Food Truck Summits to proactively support operator compliance
- 4. Require staff to utilize translator services to assure adequate communication for all our community
- 5. 2019 was the first year for mandatory posting of Food Sanitation Grades by each city licensed food establishment. Since the system was implemented, CDC Risk Factor Violations have reduced by 5%

Weights and measures:

6. Reorganized program to a team approach under one supervisor

Tattoo and body art:

7. Annually inspect over 350 artists over a 3 day period during a convention protecting consumers from blood borne pathogens



2019 KEY CHALLENGES

- Staffing shortages additional supervisors were needed. At one point there was only one supervisor with all inspectors reporting directly to them.
- Preparing for the DNC additional time
 was required in order to onboard staff for
 preparedness beyond just food safety.
 Trainings and preliminary work for the DNC
 began at the end of 2019.

Community Health

Maternal and Child Health
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Environmental Health

Consumer Environmental Health

Home Environmental Health

Emergency Preparedness & Environmental Health

Medical Services

Clinical Operations

Laboratory Services

Policy, Innovation, and Engagement

The Home Environmental Health Division (HEH) of the City of Milwaukee Health Department consists of four complimentary programs that together aim to keep children and families healthy and safe:

The Lead Hazard Reduction Program

The Home Environmental Health Division (HEH) investigates children screened and identified with elevated blood lead levels. Children with high levels of lead are provided nurse case management and the source of the child's exposure is identified in the child's environment through the completion of lead inspection and risk assessment. If lead hazards are identified written orders



are issued, the department monitors the hazard abatement by a state certified lead abatement contractor and assures the hazard is mitigated through clearance testing. The department administers grants to assist property owners with the expense of lead hazard abatement. In addition, the Lead Poisoning Prevention program works with community partners to distribute water filters to individuals whose homes are served by lead laterals. The program conducts water sampling in school and childcare facilities to check for lead. The program works to educate the community and medical providers around the risks of lead and the need to screen children for lead poisoning.

The **Lead Surveillance and Response program** collects and reports on blood lead tests for ongoing epidemiological surveillance and provides the required comprehensive nursing case management and care coordination services in response to lead poisoned children. In brief, the program manages blood lead testing data for the city of Milwaukee and ensures lead poisoned children receive the required services based on their reported lead level by providing home visitation services, assessing the child's health and social-emotional wellbeing, providing families tools to support the child's learning and development, and ensuring necessary referrals are made to support the family. This program works in conjunction with internal and external partners to ensure the family and child receive proper medical management.

The **Healthy Homes program** provides the required comprehensive assessment of health and safety hazards as outlined by HUD. In brief, the program manages healthy homes projects from initiation to closure by distributing financial assistance, providing a comprehensive health and safety investigation, developing scopes of work to address hazards, collaborating with contractors to perform the work, monitoring ongoing projects, and providing final review of projects. This program works closely with the Housing Authority of the City of Milwaukee, as well as other internal and external partners, to protect the health and safety of children and families.

The Water Quality Testing program provides ongoing education and water testing in support of city-wide efforts centered on lead in water issues. In brief, the program manages water filter distribution by collaborating with internal and external partners to ensure filters are distributed to targeted populations and manages water testing by conducting sampling in schools, childcare facilities, and homes. This program ensures children, families, and facilities receive the education and testing necessary to understand potential hazards due to lead in water.

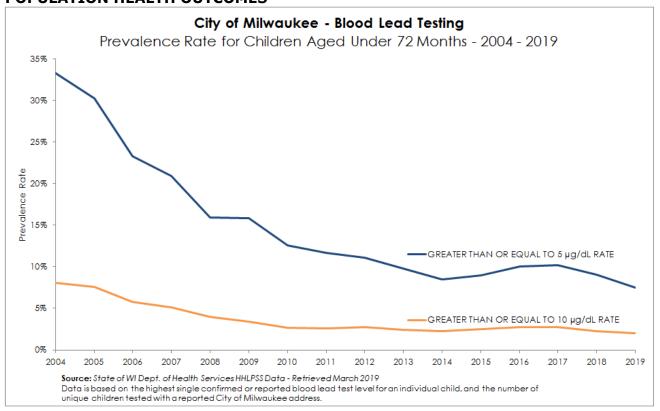
PROGRAM OPERATIONS

Branch & Division:	Environmental Health: Home Environmental Health
Established:	1997
2019 Expenses:	\$3,657,567
O&M Expenses:	\$1,582,509
Grant Expenses:	\$2,075,058
2019 Staffing:	32.00 FTE
O&M FTE:	9.00 FTE
Grant FTE:	23.00 FTE

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
Lead Hazard Reduction Demonstration Grant	US Department of Housing and Urban Development	11-01-2016 through 03-31-2020	\$3,399,998
Lead Detection Grant	State of Wisconsin	01-01-2019 through 12-31-2019	\$250,489
Lead Abatement Grant	City of Milwaukee Community Development Grant	01-01-2019 through 12-31-2019	\$1,500,000
Lead Prevention Grant	City of Milwaukee Community Development Grant	01-01-2019 through 12-31-2019	\$681,488

POPULATION HEALTH OUTCOMES



PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019
Lead Hazard Reduction	•	•			
Number of Lead Inspections completed			251	235	194
Number of Risk Assessments Completed			232	209	203
Number of permits issued	291	299	291	192	220
Number of MHD final clearances		385	386	152	156
Number of families provided relocation services				Not available	60
Number of orders issued			22	163	191
Healthy Homes					
Number of Healthy Homes Assessments completed					44
Lead Surveillance and Response					
Number of OBL outreach letters sent			1,891	2,350	3,952
Number of children referred for nurse case management			70	88	71
Number of children requiring chelation				21	10
Number of chelation events				23	13
Number of nurse cases closed				31	118
Number of nurse case management outreach attempts					2,628
Number of developmental screenings completed					153
Water Quality Testing					
Number of water samples collected from childcare facilities		844	1,252	80	41
Number of water samples collected from chartered schools				411	389
Number of water filters distributed		1,588	1,965	1,537	2,610
Division Metrics					
Total combined revenue generated from lead billing			\$2,970	\$50,507	\$95,200
Revenue generated from environmental investigation billing			\$2,102	\$45,163	\$86,300
Revenue generated from case management billing			\$867	\$5,344	\$8900
Number of outreach events attended			48	43	36

At the end of 2018, the Department piloted a process to relocate families while their homes are being made lead-safe.

PERFORMANCE MEASURES, Continued

Measure	2015	2016	2017	2018	2019
Lead Epidemiology					
Total number of reported tests	35,415	35,129	36,604	37,907	34,493
Total number of children tested	26,937	26,233	26,797	27,779	26,134
Total number of reported tests for children under 72 months	33,716	33,207	34,613	34,186	32,933
Total number of children under 72 months tested	25,395	24,494	25,051	24,388	24,736
Total Number of Children Under 72 Months – 5-9.9 μg/dL	1,651	1,794	1,865	1,658	1,368
Total Number of Children Under 72 Months – 10-14.9 μg/dL	401	420	385	316	271
Total Number of Children Under 72 Months – 15-19.9 μg/dL	117	134	150	115	106
Total Number of Children Under 72 Months – 20-39.9 μg/dL	95	100	124	99	101
Total Number of Children Under 72 Months – Greater than 40 µg/dL	16	14	26	24	14
Rate of Children Under 72 Months – Greater than 5 μg/dL	9.0%	10.1%	10.2%	9.1%	7.7%
Rate of Children Under 72 Months – Greater than 10 µg/dL	2.5%	2.7%	2.7%	2.3%	2.0%
% of Children 12 to 35 Months of Age with at least 1 Lead Test	68.3%	70.6%	73.2%		

Revised Lead
Epidemiology data
based on combined
state data available
from the Healthy
Homes and Lead
Poisoning
Surveillance System
(HHLPSS)

2019 KEY ACCOMPLISHMENTS

- 1. The HUD stop work order was lifted on February 12, 2019 as a result of process that was made in 2018. This eliminated the need for every project to undergo a review by HUD prior to initiating abatement work. This step is vital in establishing a plan to submit for future HUD grants.
- 2. The division is now in compliance with all DHS requirements for nursing case management.
- 3. HUD awarded \$5.6 Million for Lead Hazard Reduction and Healthy Homes.
- 4. The division, with department support, organized, staffed, and promoted health clinics to provide lead education, water filters, and lead testing. As part of this effort, the division attempted delivery of 3,952 letters to families of children affected by lead poisoning.
- 5. Implemented a Central Filing System and Data Management policy, includes the new database Quickbase
- 6. Partnership with Community Advocates helping relocate families from inhabitable properties and while their homes are under abatement.

2019 KEY CHALLENGES

The division encountered staffing retention challenges and started new recruitment of Public Health Nurses and were able to stabilize the nursing case management by the end of 2019. Policies and procedures required by Department of Health Services (DHS) were in the process of development and implementation.

Community Health

Maternal and Child Health

Office of Violence Prevention

Environmental Health

Consumer Environmental Health Home Environmental Health

Emergency Preparedness & Environmental Health

Medical Services

Clinical Operations

Laboratory Services

Policy, Innovation, and Engagement



Emergency Preparedness and Environmental Health



Emergency Preparedness

The Emergency Response Preparedness Program works to build departmental and community resilience to a wide array of hazards. Staff is responsible for development of emergency response plans and protocols, internal and external resource identification, and coordination of assets that may be deployed or managed by the MHD during both man-made (i.e. bioterrorism, hazardous material release) or naturally occurring (i.e. communicable disease outbreaks, extreme weather/natural disasters, critical infrastructure incapacity or destruction) public health emergencies. MHD works with other public, private and non-profit agencies to improve public health emergency planning and response and provides technical and operational support during department response to emergency events.



Bioterrorism

MHD helps coordinate inter-agency and inter-jurisdictional planning and response throughout a two county area. Partners in regional preparedness include other Local Health Departments, Wisconsin Division of Public Health (DPH), Wisconsin and County Offices of Emergency Management, Federal Bureau of Investigation (FBI), Federal Emergency Management Agency (FEMA) Region V, Milwaukee Fire Department (MFD), Milwaukee Police Department (MPD) and others. As part of the Center for Disease Control and Prevention (CDC) Cities Readiness Initiative (CRI), MHD develops, tests and maintains plans to rapidly receive medical countermeasures (antibiotics, vaccines, antivirals) from the Strategic National Stockpile (SNS) and distribute them to the public through Points of Dispensing (PODs) in the event of a large scale public health emergency.

Communicable Disease Outbreaks

Emergency Preparedness aids response efforts to local or regional disease outbreaks. The MHD communicable disease program helps coordinate disease surveillance throughout Milwaukee County through SurvNet and the Wisconsin Electronic Disease Surveillance System (WEDSS). Preparedness activities in recent years have included participation in the Zika Action Plan Committee 2016-2017 and mobilization of resources surrounding the 2014-2015 Ebola outbreak. Planning and exercising response plans for pandemic influenza is a key part of public health preparedness. The most recent responses took place during the 2009-2010 H1N1 influenza pandemic and the current and ongoing COVID-19 (Coronavirus) pandemic.

Extreme Weather

MHD continues to help coordinate and convene the regional Milwaukee Metropolitan Area Heat Task Force (MHTF). Over 40 current active members include governmental agencies at the municipal, county and state level and diverse private, non-profit, and community-based organizations. The MHTF develops, maintains, and implements plans to provide a coordinated, community-based response during a heat event. MHD issues alerts for members ahead of a forecast or actual event to activate both internal and public safety plans. MHD also maintains the Milwaukee Extreme Cold Event Emergency Operations Plan to address the public health hazards associated with extremely cold temperatures and wind chill levels.

Hazardous Materials

MHD is notified and occasionally consulted by the MFD HAZMAT unit in the event of serious hazardous material releases. MHD representatives take part in the Local Emergency Planning Committee (LEPC) which carries out mandates of the Emergency Planning and Community Right to Know Act. The committee inspects facilities that are required to submit hazardous inventories and emergency plans to compare the safety and readiness initiatives described in the plans to observations in the facilities. Plans are formally reviewed and approved every four to five years for hundreds of facilities in and near Milwaukee.

PROGRAM OPERATIONS

Branch & Division:	Environmental Health: Emergency Preparedness and Environmental Health
Established:	2004; Beach Monitoring (2008); Climate Change (2016); West Nile (2002)
2019 Expenses:	
O&M Expenses:	\$929,705
Grant Expenses:	\$539,282
2019 Staffing:	
O&M FTE:	2
Grant FTE:	2
Total FTE:	4

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
Public Health Preparedness*	State of Wisconsin, Department of Health Services	7/1/18- 6/30/19	\$327,343
Public Health Preparedness*	State of Wisconsin, Department of Health Services	7/1/19- 6/30/20	\$325,122
City Readiness Initiative*	State of Wisconsin, Department of Health Services	7/1/18- 6/30/19	\$173,732
City Readiness Initiative*	State of Wisconsin, Department of Health Services	7/1/19- 6/30/20	\$177,098
*Grant supports more than one	MHD program or initiative.		

PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019
Percent of employees who have completed required Incident Command System (ICS) training				85%	91%
Percent of staff successfully receiving exercised emergency notification messaging				86%	95%
Percent of employees likely to wear respiratory protection for work				88%	91%
Number of chemical storage plans reviewed as part of the Local Emergency Planning Committee (LEPC)				7	42
Public Health Emergency Operations Plan (EOP) reviewed and updated				Yes	Yes

Environmental Health

Environmental health utilizes a combination of surveillance, health promotion, enforcement, and assessment to prevent disease and injury, eliminate the disparate impact of environmental health risks and threats on population subgroups, and create health-supportive environments where everyone in Milwaukee has an equal chance to thrive. Projects/areas of investigation include:

indoor/outdoor air quality, animal bites and rabies control, climate change and extreme weather, drinking water quality, human health hazards, mosquito surveillance and control, and recreational water quality.

Climate Change and Health

To enhance regional awareness of climate change mitigation, adaptation, and resilience activities, the City of Milwaukee Health Department Climate Change and Health project has partnered with Reflo—Sustainable Water Solutions, a non-profit organization located in Milwaukee. Together, the MHD and Reflo have worked to support



climate change adaptation and promote community health and health equity by sustainably improving food security, decreasing storm-water runoff, and decreasing carbon emissions associated with transportation of food, water treatment and transmission. Through a collaborative project, Reflo has partnered with several Milwaukee community gardens to provide rainwater harvesting structures. As part of the project, the MHD hosted seven educational sessions to engage and educate the public about climate change, water, and health.

Mosquito Surveillance and Control

West Nile Virus (WNV) is a mosquito-borne virus that can cause a range of illnesses. Most people infected (about 80%) have no symptoms. Others, however, experience flu-like symptoms with a possible rash and swollen glands. Less than 1% of cases include more serious neurological symptoms, and about 5% of cases are fatal. The MHD WNV Surveillance and Control Program consists of public education and outreach and surveillance (monitoring human, wild bird, mosquito, and other animals for viral activity).

Recreational Water Quality and Beach Monitoring

To assure that Milwaukee beach-goers have safe, healthy summer fun at the beach, the MHD operates from Memorial Day through Labor Day to monitor water quality at each of the city's three public beaches and issues daily water quality notifications to the public. Testing and advisories are also conducted for special event venues such as Lakeshore State Park and Veteran's Park Lagoon. Through a continued partnership with the University of Wisconsin-Milwaukee Zilber School of Public Health's Miller Laboratory (ZSPH), water samples are collected and analyzed at both ZSPH and MHD laboratories. Analysis determines the levels of *E. coli*, a micro-organism, present in the water. While *E. coli* is normally found in bodies of water, elevated levels can raise health concerns. In addition, combining test results with a model that looks at a variety of beach conditions such as water temperature, wind direction, wave height, and more allows MHD staff to predict the *E. coli* value and issue public notifications daily online and at each beach.

Environmental Health Investigations, Consultations, and Remediations

The environmental health program regularly performs environmental investigations or varied duration and complexity in response to citizen/business complaints and reports from MFD and other agencies. These principally relate to fugitive odors or other known or suspected chemical contaminations, such as carbon monoxide exposure incidents. Sometimes the issue may be resolved through a phone or in-person consultation. Other situations involve ongoing known environmental problems and may require months or years of surveillance, inter-agency coordination, and public messaging.

The program also conducts phone and walk-in consultations with citizens expressing health concerns related to mold or other factors affecting indoor air quality, drinking water quality, scabies, lice, bedbugs, etc. Satisfactory resolution may involve self-help information or referrals to healthcare, other City departments, or community assistance agencies.

Animals Bites and Rabies Control

Rabies exposure (human and pet) is a significant subset of health investigations in which MHD takes a central role in protecting citizens' health. All reports of possible domestic, feral, or wild mammal exposures are reviewed. When indicated, animal specimens are shipped to the Wisconsin State Lab of Hygiene for testing. Program staff consults with and advises healthcare professionals and patients on post-exposure prophylaxis decisions. In addition, quarantine of pets are ordered and monitored when possible exposure occurs through unvaccinated domestic, feral, or wild animal contact.

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period			
Beach Monitoring*	State of Wisconsin, Department of Natural Resources	4/1/19- 11/30/19	\$10,500			
*Grant supports more than one MHD program or initiative.						

PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019
Total number of beach water samples collected	245	229	183	179	169
Total number of beach postings for the season	315	291	291	303	293
Total number of water samples – Summerfest	203	219	215	210	202
Number of Safety Committee meetings		8	9	3	10
Number of larviciding doses delivered in the City of Milwaukee	5,382	5,089			

POPULATION HEALTH OUTCOMES

Measure	2015	2016	2017	2018	2019
Number of closures of individual beaches	24	12	26	33	5
Number of cases of West Nile Virus in the City of Milwaukee	2	0	2	0	0
Percent of mosquito pools that tested positive for WNV	9.2%	30.8%	11.7%		No mosquito testing in 2019
Number of mosquito pools that tested positive for WNV				124	No mosquito testing in 2019

2019 ACCOMPLISHMENTS

- 1. DNC Planning: EPEH Coordinated public health representation on 11 USSS Subcommittees, formed 12 Workgroups that fed into Subcommittees. Monthly coordination meetings were held with 26 Local Health Departments, 7 State and Regional Agencies, and 4 Federal Agencies.
- 2. Convened new MHD Preparedness Committee
- 3. Transitioned from MHD Emergency Operations Plan (EOP) to regional Public Health Emergency Response Plan (PHERP)
- 4. Conducted 191 case reviews of potential CO monoxide exposures, with investigations/follow up that included: patient interviews and consultation, follow up with owners/ landlords, educational outreach, and referrals to DNS for code enforcement, as appropriate.
- 5. Coordinated response to cold weather emergency 2019 Polar Vortex
- 6. Coordination of Milwaukee Metropolitan Heat Task Force transitioning to Year-round All Hazards Task Force
- 7. Public notification of beach water quality hazards
- 8. Provided advice and expertise within the community regarding indoor air concerns in homes, schools, offices and public facilities.
- 9. Active Safety Committee
- 10. MHD remodel coordination and execution

2019 KEY CHALLENGES

- 1. Continued staffing shortages
- 2. Data availability from the USGS Environmental Data Discovery and Transformation Service (EnDDaT) continued to affect predictive modelling efforts for recreational water quality at area beaches.
- 3. Ongoing need to transition away from using CityWatch as the citywide notification system to a new communications system with improved and expanded capabilities.
- 4. Funding shortfalls to address areas of preparedness and environmental health need in the City of Milwaukee

Community Health

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Emergency Preparedness & Environmental Health

Medical Services

Clinical Operations

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Policy, Innovation, and Engagement

PROGRAM OPERATIONS

Branch & Division:	Medical Services: Clinical Operations
Established:	Communicable Disease: 1867; Tuberculosis Control: 1912; Immunizations: 1866 Venereal Disease Clinic: 1920, renamed Social Hygiene Clinic in 1977 and STD Clinic in 1989 Breast Cancer Services: 1990; Well Woman: 1994
2019 Expenses:	
O&M Expenses:	\$1,942,443
Grant Expenses:	\$1,557,415
2019 Staffing: Total FTE:	54
O&M FTE:	31.8
Grant FTE:	22.2
Total positions vacant at any point in 2019	12



Infectious Disease Program

Communicable Disease Control

Since its inception, the City of Milwaukee Health Department has been a leader in the detection and response to communicable disease outbreaks. The reporting, surveillance, and control of reportable communicable diseases is a core public health function and is mandated by Wisconsin State Statute and Wisconsin Administrative Code. Communicable diseases requiring follow-up include vaccine-preventable diseases such as mumps and pertussis, vector- borne diseases such as Zika and Lyme disease, and gastrointestinal diseases such as Shigella and salmonella.

Communicable Disease (CD) program staff investigate reports of communicable diseases and outbreaks, conduct contact investigations, monitor communicable disease trends, provide educational interventions, and supply prophylactic medications when necessary. In addition, the program staff serve as a resource for other local health departments, health care providers, schools, childcare facilities, and the citizens of the southeast region of Wisconsin.

Tuberculosis Control

The City of Milwaukee Health Department has the primary responsibility for preventing and caring for those with Tuberculosis (TB) in the city. The Tuberculosis Prevention and Care Clinic (TPCC) uses evidence-based interventions to assure that all persons needing to be evaluated for TB are identified and treated, and that appropriate course of action is taken to mitigate the spread of TB. Every TB case is a potential outbreak, and the program must be prepared to promptly identify and treat persons who have TB disease, as well as identify and treat those exposed to TB. Anyone can get TB; however, TB disproportionately impacts people of color, foreign-born (including resettled refugees), those with low socioeconomic status, and other marginalized populations.

Immunizations

One of the most important tools to protect our community from disease is immunizations. Sustaining high childhood immunization rates in the city, along with reducing disparities among racial groups, remain primary objectives of the City of Milwaukee Health Department (MHD) Immunization Program. Improving immunization rates helps suppress outbreaks of vaccine preventable diseases.

The MHD not only provides immunizations during weekly walk-in clinics at its three health center locations, it partners with community agencies to provide clinics throughout the city. In addition, the program partners with the Communicable Disease and Emergency Preparedness Programs to respond to communicable disease outbreaks while also conducting educational symposiums and events directed toward schools, day cares, and clinicians to increase compliance with Wisconsin immunization law and coordinate delivery of immunizations in the community.

As a partner in the Immunize Milwaukee! Coalition, the Program provides education for area providers at an annual symposium and continues to develop partnerships to coordinate the delivery of immunizations in the community.

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
Communicable Disease Prevention	State of Wisconsin, Department of Health Services	7/1/2019 – 6/30/2020	\$28,900
Immunization Action Plan	State of Wisconsin, Department of Health Services	1/1/2019 – 12/31/2019	\$243,613

PERFORMANCE & OUTCOME MEASURES

Measure	2015	2016	2017	2018	2019
Communicable Disease Control					
# of cases of CD reported*	1,372	1,169	994	1,033	884
# of cases of communicable disease reported requiring follow up			797	777	771
% of individuals provided case management for CDs requiring follow up			100%	100%	100%
# of outbreaks investigated**	30	30	41	34	19
Tuberculosis Control					
# of x rays performed	375	578	253	224	192
# of x rays read for TB Clinic	560	406	254	239	202
# of TB clinic visits	532	635	380	398	463
# of Directly Observed Therapy home visits		1,849	1,907	1,287	2,008
# of refugees provided follow up service (screenings/TB care)	30	38	11	39	23
# of cases of tuberculosis	15	9	10	16	14
# of cases of multi-drug- resistant TB	1	0	0	1	0
# of clients provided TB case management	15	9	10	16	14

^{*}These numbers do not include influenza associated hospitalizations, tuberculosis, or sexually transmitted infections.

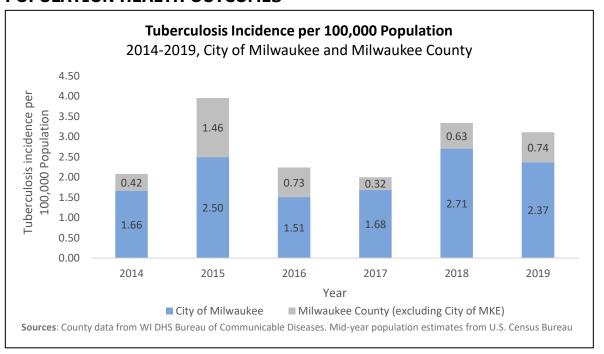
 $[\]hbox{**Includes respiratory and gastrointestinal outbreaks.}$

PERFORMANCE & OUTCOME MEASURES, Continued

Measure	2015	2016	2017	2018	2019
Immunizations					
# of clients immunized	3,937	3,151	2,905	2,208	2,479
# of immunizations provided	10,558	8,359	8,271	5,921	6,859
# of offsite clinics	24	34	23	28	17
# of school / childcare education sessions provided		5	5	4	3
# of two-year-old reminder/recall letters mailed	3,437	3,094	3,207	3,456	3,612
% of two-year-olds in the City of Milwaukee who are up to date on their immunizations by 24 months of age	63%	66%	66%	62%	62%
% of children in compliance with school required immunizations	90%	91%	92%	92%	91%

Measure	2006	2009	2012	2015	2018
Flu Vaccination (Past Year) - 18 years and older	34%	38%	35%	43%	45%
Flu Vaccination (Past Year) – 65 years and older	69%	65%	60%	76%	74%

POPULATION HEALTH OUTCOMES



2019 KEY ACCOMPLISHMENTS

- The TB program upgraded the X-ray technology to a digital X-ray system. This will allow for improvements in workflow and require less maintenance as there is no longer a need for chemicals or film processing.
- The immunization program held 17 separate off-site immunization clinics in 2019 and participated in 23 outreach events to provide education and increase awareness about the importance of immunizations.
- 3. The immunization program administered 6,859 vaccines to 2,479 clients in 2019.

2019 KEY CHALLENGES

- 1. The TB program continues to face challenges working with an outdated paper charting system and obsolete software for scheduling client visits and maintaining health records.
- 2. The public continues to receive negative and misleading information regarding the safety and efficacy of vaccines which has likely contributed to a decrease in immunization rates for both children and adults. The MHD Immunization Program continues to counter these false messages by providing accurate and understandable information both individually, to the clients we serve in our clinics, and to the wider community through our public messaging.



Sexual and Reproductive Health

The Sexual and Reproductive Health Program provides sexual and reproductive health services including confidential testing, treatment and education to residents of Milwaukee and the surrounding communities. Services are provided at Keenan Health Clinic by medical, nursing and clinical laboratory staff to anyone who is at least 12 years of age, at no cost to the client.

The Disease Intervention Specialists (DIS) perform epidemiological investigations, partner services, linkage to care, field delivered therapy and follow-up for clients known or suspected of having a reportable sexually transmitted infection (STI) such as gonorrhea (GC), chlamydia (CT), HIV and syphilis in the city, and conduct follow-up for HIV cases in Milwaukee County and syphilis cases across the Southeastern Region of Wisconsin.

Most STI's are asymptomatic, but if these infections remain undetected and untreated, they have serious health consequences and, in addition, pose a 3-to-5-fold increased risk of HIV transmission.

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
HIV Prevention and Partner Services	State of Wisconsin, Department of Health Services	01/01/2019- 12/31/2019	\$222,000
Women's Health Family Planning (WHFP)	State of Wisconsin, Department of Health Services	01/01/2019- 12/31/2019	\$328,000
STD Apps	State of Wisconsin, Department of Health Services	01/01/2019- 12/31/2019	\$447,431

INTERVENTION MEASURES, specific to Keenan Health Center

Measure	2015	2016	2017	2018	2019
# of clients served	5,437	5,188	5,123	4,214	5,262
# of persons tested for STIs	4,709	4,406	4,361	3,645	4,486
# of persons turned away due to clinic capacity limitations	389	455	639	909	520
# of HIV tests conducted	3,687	3,551	3,593	3,087	3,581
# of persons who were offered a PrEP referral to prevent HIV transmission	14	114	166	147	1,019
# of condoms distributed			62,000	67,500	19,000 (Jan-May)
# of persons provided Plan B	0	161	148	250	363

OUTCOME MEASURES, specific to Keenan Health Center/Sexual Reproductive Health Program unless otherwise specified

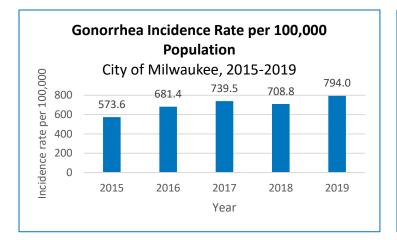
Measure	2015	2016	2017	2018	2019
# of positive HIV tests	16	25	48	28	34
# of positive gonorrhea tests	2,002	1,642	2,061	1,510	1,930
# of positive syphilis tests	269	321	412	364	519
# of STI/HIV cases assigned for case management (Chlamydia, Gonorrhea, Syphilis, and HIV follow-up)	1,042	881	973	671	915
# of new HIV infections identified in the city of Milwaukee	108	104	117	109	104*
# of cases of gonorrhea in the city of Milwaukee	3,396	4,034	4,378	4,202	4,686
# of cases of primary and secondary syphilis in the city of Milwaukee	32	41	66	57	97
% of persons who accepted PrEP referral to prevent HIV transmission	71% (10)	84% (96)	83% (138)	83% (122)	46% (468)

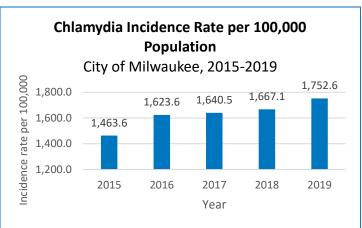
^{*}Preliminary count

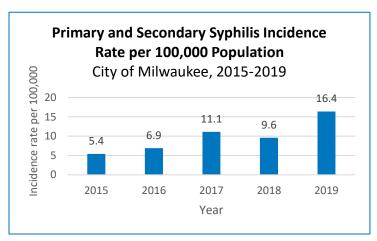
CUSTOMER AND COMMUNITY IMPACT MEASURES

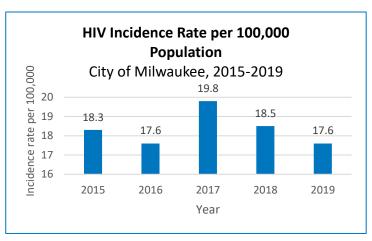
Measure	2015	2016	2017	2018	2019
% of HIV cases linked to care	68%	80%	74%	73%	79%
% of cases receiving case management for STIs that were successfully treated	89%	89%	87%	85%	89%

POPULATION HEALTH OUTCOMES









2019 KEY ACCOMPLISHMENTS

- 1. Keenan Health Center remains the clinic of choice for treating male Gonorrhea in the Milwaukee area. We treat 15.5% of all Gonorrhea cases for men.
- 2. Collaborated with AIDS Resource Center of Wisconsin to offer same-day PrEP services to clients seeking care at Keenan Health Center's Sexual Health Clinic.
- 3. Moved into the action phase of the STI strategic planning process

2019 KEY CHALLENGES

- 1. Lack of an Electronic Health Record system
- 2. Staffing remains a challenge, mostly due to pay

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Well Woman and WISEWOMAN Programs

The Well Woman Program (WWP) provides preventive health screening services to women with low-income who are uninsured or underinsured. Well Woman pays for mammograms, Pap tests, and multiple sclerosis testing. The program is administered by the Wisconsin Department of Health and Family Services, Division of Public Health, and is available in all 72 Wisconsin Counties and 11 tribes, including the City of Milwaukee Health Department. Well Woman works to decrease the mortality rate of breast and cervical cancer in all women in the city of Milwaukee through education, outreach, screening, treatment, community awareness and involvement.

Well Woman provides the following services:

- Mammograms
- Clinical Breast Exams (CBE)
- Breast Cancer Treatment Referral
- Breast Self-Exam Instruction
- Pap Tests
- Assessments for Multiple Sclerosis

WISEWOMAN Program

Those who are eligible for the Wisconsin Well Woman Program are also eligible for the WISEWOMAN program. The WISEWOMAN program provides cardiovascular (heart disease and stroke) risk factor screening services.

Covered services:

- Specified cardiovascular risk factor screening and diagnostic tests.
- Lifestyle intervention activities to help women learn how to reduce risk factors for heart disease and stroke.

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
Breast Cancer Grant, Carita B. Urban	Greater Milwaukee Foundation	1/1/19- 9/1/19	\$14,079
Breast Cancer Well Women	State of Wisconsin, Department of Health Services	7/1/19- 6/30/20	\$728,000

PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019
Screening Objective	750	750 700		950	900
Milwaukee residents ages 35-64 years screened for breast and cervical cancer (unduplicated)	1,031	1,044	999	9s29	1,057
Total number of breast cancer screenings	672	779	803	901	1,008
Breast screenings, in- house (mammograms and clinical breast exams only)	507	521	478	453	474
Breast screenings, provider	165	258	325	448	544
Total number of cervical cancer screenings	70	175	164	98	74
Cervical screenings, inhouse	69	173	160	98	71
Cervical screenings, provider	1	2	4	0	3
Case management encounters	4,918	6,721	10,468	7,327	8,487
WISEWOMAN clients enrolled	17	166	297	82	78
Number of community events	24	29	18	13	21

2019 KEY ACCOMPLISHMENTS

- 1. Exceeded our State screening objective by 157
- 2. Increased enrollments during October for Breast Cancer Awareness month
- 3. Successful partnership with Ascension Mobile Screening van held 4 events in 2019
- 4. Establisted new partnerships with Aurora Health Care Walker's Point Community Clinic and St. Adalbert's Church

2019 KEY CHALLENGES

- 1. Contract extension issues for the Nurse Practitioner Services meant we were not able to provide screening services at the MHD site from July September 2019
- 2. Contract issues for the Selenia Digital and PACS maintenance services
- We are only able to provide screenings on dates that the Walker's Point Nurse Practitioners are available which limits providing screening services

Total screenings include 2019 to 2020 to meet the screening objective. The 2019 screening objective ends in June 2020, based on the grant cycle.

Each client receives case management services through the program. Case management includes scheduling appointments, reviewing charts, and ensuring proper follow-up screenings are conducted.

The new grant cycle will be providing outreach only, as MHD is not a true medical clinic and thus is unable to offer the full range of services required, such as pharmacy and cardiovascular follow-up. The program is not meant to be a screening only program.

Community Health

Maternal and Child Health
Office of Violence Prevention

Environmental Health

Consumer Environmental Health
Home Environmental Health
Emergency Preparedness & Environmental Health

Medical Services

Clinical Operations

Laboratory Services

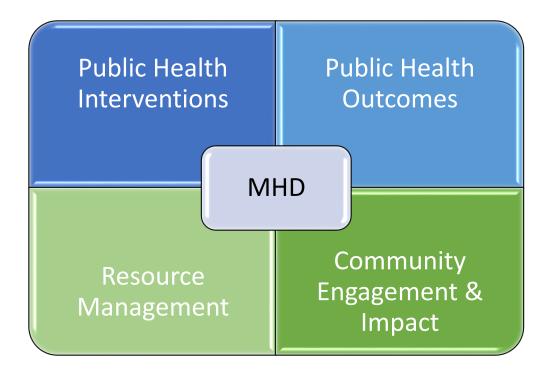
Policy, Innovation, and Engagement

The following section for the Milwaukee Health Department Laboratory previews a new annual report format.

The MHD is working on implementing a Performance Management and Quality Improvement (PMQI) system that adopts an evidence-based performance measurement framework known as the Balanced Scorecard. The MHD plans to restructure future Annual Reports to align with the new Balanced Scorecard approach. Though in its early stages, the new PMQI Balanced Scorecard approach will assess performance in four areas:

- 1. Public Health Interventions What we do
- 2. Public Health Outcomes The difference made by what we do
- 3. Community Engagement and Impact How involved we are with our community partners and customer satisfactions
- 4. Resource Management How effectively and efficiently we are using our resources

Each branch will identify strategies and activities to be carried out by its divisions and programs to facilitate successful achievement of the MHD's mission and goals.





Milwaukee Health Department Laboratory

The Milwaukee Health Department Laboratory (MHDL) is part of the Clinical Services Branch of the City of Milwaukee Health Department. MHDL works diligently to support local public health systems in collaboration with the Environmental Health and Community Health branches by providing a variety of clinical and environmental testing, as well as various reference laboratory testing services. Additionally, the lab is constantly working to protect the health of the community by providing real-time disease surveillance from a local to international scale, and by responding to threats of public health concerns and/or emergencies. The lab also works in partnership with local health care providers, academic institutions, and community organizations to provide public health education and training, research, and to develop quality improvement initiatives.



2019 Active Grants

Grant	Funder	Grant Period	Amount Over Grant Period
Epidemiology and Lab Capacity: Strengthening U.S.	State of Wisconsin,	8/1/19-7/31/20	\$327,392
Response to Resistant Gonorrhea (SURRG)	Department of Health Services	8/1/18-7/31/19	\$324,846
Gentamicin susceptibility testing of <i>Neisseria</i> gonorrhoeae	Association of Public Health Laboratories (APHL)	8/1/19-6/30/20	\$7,500
Laboratory System Improvement Program (L-SIP): Strengthening the Local PHL System	Association of Public Health Laboratories (APHL)	3/1/19-6/30/19	\$10,000
Test Verification for Detection of Infection with Mycobacterium tuberculosis with Interferon Gamma Release Assay (IGRA)	Association of Public Health Laboratories (APHL)	11/1/18- 6/30/19	\$24,436
Evaluation of a laboratory developed molecular test for the diagnosis of genital ulcer disease (GUD)	Association of Public Health Laboratories (APHL)	10/1/18- 6/30/19	\$11,000
STD HIV and Infertility Prevention Grants (2) (via MHD STD Program)	State of Wisconsin, Department of Health Services	1/1/19- 12/31/19	\$197,000; \$353,470
CDGA Lead Grants (2) (via MHD Lead Program)	Centers for Disease Control and Prevention (CDC)	1/1/18- 12/31/19	\$1.5M; \$681,488
Lead Hazard Reduction Grant (via MHD Lead Program)	U.S. Department of Housing and Urban Development (HUD)	11/1/16- 10/31/19	\$3,399,998



Public Health Interventions

Strategy 1: Provide laboratory testing for the detection of communicable diseases for clinical partners and in support of MHD programs, outbreaks and investigations

Test Performed	2016	2017	2018	2019	3 Year Avg.	Trend
Respiratory Specimens	555	634	666	687	662	1
Gastrointestinal Specimens	630	382	272	210	288	V
Syphilis	7,184	7,272	6,342	7,318	6,977	
Chlamydia	11,632	13,428	11,817	13,709	12,985	
Gonorrhea	14,477	16,999	16,386	18,266	17,217	
Mycoplasma	N/A	N/A	N/A	1,596	N/A	
Trichomonas	5,519	5,285	4,363	4,528	4,725	
HIV	3,578	3,725	3,163	3,698	3,529	
Herpes	342	499	421	364	428	Ψ
Other Clinical Reference Tests	296	390	260	212	287	4

Strategy 2: Provide laboratory testing for the detection of environmental pathogens and health hazards in support of MHD programs, outbreaks and investigations

Test Performed	2016	2017	2018	2019	3 Year Avg.	Trend**
Lead in Dust wipes, Paint, Soil	8,488	8,289	5,780	6,137*	6,735	1
Lead in Water		859	1,425	1,428	1,237	↑
Summerfest Water (Potable)	669	649	630	613	631	
Beach Water (Recreational)**	307	273	191	175	213	\
Municipal Water (Potable)	713	669	627	677	658	↑
Water Treatment Plant (Potable;	60	89	95	72	85	
Cryptosporidium etc.)						
Harmful Algal Blooms***	N/A	N/A	84	44	N/A	V
Food- Dairy	445	359	533	83	325	V
Food- Beef, Deli, Fish	274	373	391	32	265	V
Other Environmental Reference Tests	321	288	205	439	311	↑

^{*}A typical home assessment consists of 10 to 15 individual samples analyzed

Strategy 3: Develop and maintain relationships with public health laboratory system stakeholders and community partners

	2016	2017	2018	2019	3 Year Avg.	Trend
# of laboratory system partner events hosted	0	1	2	3	2	1
# of LRN Activities- Bio-threat Detection	6	25	24	24	24	
# of external conferences, meetings & trainings	16	19	30	24	24	
attended						

Strategy 4: Ensure necessary resource allocation and management to maintain quality, reliable testing operations

	2016	2017	2018	2019	3 Year Avg.	Trend
# of active grants	2	3	6	7	5	1
# of grant applications submitted	1	3	8	8	6	1
# of grants applied for awarded	1	2	4	4	3	1

^{**}Beach Water: Discontinued testing for North Shore Health Department and reduced sampling frequency of Milwaukee beaches in 2018

^{***}Harmful Algal Blooms: Reduced sampling locations in 2019



Public Health Outcomes

Strategy 1: Provide laboratory testing for the detection of communicable diseases for clinical partners and in support of MHD programs, outbreaks and investigations

	2016	2017	2018	2019	3 Year Avg.	Trend**
# of positive HIV cases reported	14	34	22	28	28	
# of resistant Gonorrhea identified	32*	11	23	151	62	↑
# Mycoplasma genitalium infections detected	N/A	N/A	N/A	354	N/A	
# of clients using self-collect option at Sexual Health Clinic	N/A	N/A	N/A	82	N/A	
Whole Genome Sequence (WGS) Analysis of Neisseria gonorrhoeae	N/A	N/A	N/A	100***	N/A	
Use of Next Generation Sequencing (NGS) in detecting antibiotic resistance markers	N/A	N/A	N/A	200****	N/A	

^{*}Kirby-Bauer method was used to detect drug-resistant Gonorrhea cases in 2015-16. Etest was used from 2017 per CDC's SURRG recommendation.

Strategy 2: Provide laboratory testing for the detection of environmental pathogens and health hazards in support of MHD programs, outbreaks and investigations

	2016	2017	2018	2019	3 Year Avg.	Trend*
# of water samples with elevated lead (5 and up)	N/A	53	174	95	107	\

^{*}DPW Lead Service Line Replacement Program, repairs and disconnection of contaminated lines likely contributed to decrease

Strategy 3: Develop and maintain relationships with public health laboratory system stakeholders and community partners

	2016	2017	2018	2019	3 Year Avg.	Trend
# of new partners testing services provided	1	2	12	5	6	

Strategy 4: Ensure necessary resource allocation and management to maintain quality, reliable testing operations

	2016	2017	2018	2019	3 Year Avg.	Trend
# of certifications maintained*	6	6	7	7	7	
# of successful regulatory inspections	4	3	3	3	3	

^{*}The following certifications are currently maintained: Clinical Laboratory Improvement Amendment (CLIA) certificate of compliance (ZMB, KHC and SSHC locations), Wisconsin Department of Agriculture, Trade & Consumer Protection (WDATCP) – Milk, Food and Water Lab certification, Wisconsin Department of Natural Resources (DNR) – Lead in Water certification, American Industrial Hygiene Association Laboratory Accreditation Programs (AIHA-LAP, LLC) – Environmental Lead certification, CDC Environmental Legionella Isolation Techniques Evaluation (ELITE) certification

^{**}Performed more antibiotic susceptibility testing (AST) for Gonorrhea as part of SURRG grant efforts (see below for additional info)

^{***} WGS analysis of N. gonorrhoeae isolates with decreased susceptibility to azithromycin allowed cluster analysis indicating divergence of isolates

^{****} Use of NGS analysis indicated successful clinical use of culture independent diagnostic testing (CIDT) in detecting antibiotic resistance markers



Community Engagement & Impact

Strategy 1: Provide laboratory testing for the detection of communicable diseases for clinical partners and in support of MHD programs, outbreaks and investigations

	2016	2017	2018	2019	3 Year Avg.	Trend
# of clients/partners served	39	45	53	51	50	1
# of new tests validated	0	0	4	4	3	

Strategy 2: Provide laboratory testing for the detection of environmental pathogens and health hazards in support of MHD programs, outbreaks and investigations

	2016	2017	2018	2019	3 Year Avg.	Trend
# of residential soil samples tested	N/A	18	55	104	59	1

Strategy 3: Develop and maintain relationships with public health laboratory system stakeholders and community partners

	2016	2017	2018	2019	3 Year Avg.	Trend
"e"lab reports to clinical partners & stakeholders	100%	100%	100%	100%	100%	
(12 per calendar year) on laboratory surveillance						
# of lab tours conducted	18	16	15	21	17	
# of academic internships hosted	5	7	8	4	6	
# of presentations, posters & publications	10	8	9	11	9	1

Strategy 4: Ensure necessary resource allocation and management to maintain quality, reliable testing operations

	2016	2017	2018	2019	3 Year Avg.	Trend
Fee for Service Revenue	\$225,766.09	\$334,766.11	\$301,047.37	\$401,068.00	\$345,627.16	
Reimbursement Revenue	\$527,497.22	\$425,319.60	\$489,418.46	\$324,867.71	\$413,201.92	



Resource Management

	2016	2017	2018	2019	3 Year Avg.	Trend
Staffing:						
Total FTEs	23.0	22.0	22.0	24.0	22.67	
O&M FTE	18.0	17.6	17.6	19.5	18.23	
Grant FTE	5.0	4.4	4.4	4.5	4.43	
Total Positions Vacant at Any Point during Year				3	-	
Expenses:						
O&M Expenses	\$1,777,346	\$1,930,681	\$2,104,709	\$2,352,697	\$2,129,362	1
Grant Expenses	\$364,606	\$503,365	\$714,602	\$366,182	\$528,050	

2019 KEY ACCOMPLISHMENTS

- 1. Improved diagnosis of syphilis by implementing Rapid Plasma Reagin (RPR)
- 2. Introduced QuantiFERON-TB Gold Plus assay to improve detection of Mycobacterium tuberculosis (TB) infection
- 3. Expanded gonorrhea testing capacity during 2019, with an increase of nearly 1,900 tests from the previous year
- 4. Maintain certification to perform food testing as required to support local foodborne outbreak investigations
- 5. Increased lead analysis in household dust, paint, soil as well as water samples
- 6. Successfully maintained CDC's Bio-threat Detection LRN-B laboratory program activities to support local, state and federal program, law enforcement, USPS and FBI
- 7. Excellent contributions to state and national conferences by presenting posters, lectures and invited speaking
- 8. Maintained CDC program activities- CDC/WHO Influenza and other respiratory virus, PulseNet, CaliciNet (enteric bacteria & viruses), sexually-transmitted infections (STI)
- 9. Successfully secured multiple grants and public health systems partnership to assure necessary program supports
- 10. Increased detection of antibiotic-resistant gonorrhea infections by >6 times the previous year. This represents a significant component of SURRG project efforts to combat drug-resistant gonorrhea in Milwaukee and other major U.S. cities.
- 11. Completed verification of in vitro diagnostic assay to detect *Mycoplasma genitalium*, leading to the diagnosis of STIs that may have otherwise gone undetected in high-risk populations seen at STI and non-STI clinics.
- 12. Maintained garden soil screening capability to support residential and urban gardeners to minimize lead exposure and to guide advising nutrient in soil
- 13. Maintained external clinical clients as well as MHD internal program supports to assist in timely detection of communicable diseases, laboratory surveillance and outbreak investigations through new test development and outstanding customer services

2019 KEY CHALLENGES

- 1. Limited administrative/office support staff
- 2. Limited technical staff for testing and clinic support
- 3. Lack of preparedness funding supports for the BSL-3 operations (unfunded mandate to support CDC's Laboratory Response Network-LRN, HHS BioWatch activities, USPS, FBI and Law enforcement supports to rule out high risk biological agents and toxins)
- 4. Limited departmental supports for grant application, logistics and admin supports
- 5. IT challenges and purchase/contract delays

Community Health

Maternal and Child Health
Office of Violence Prevention

Environmental Health

Consumer Environmental Health
Home Environmental Health
Emergency Preparedness & Environmental Health

Medical Services

Clinical Operations

Laboratory Services

Policy, Innovation, and Engagement



Policy, Innovation, and Engagement

The Policy, Innovation, and Engagement (PIE) branch is responsible for providing informed policy analysis, supporting the department's data needs, and coordinating the planning activities of the City of Milwaukee Health Department, its divisions, and programs. It also provides leadership in advocating for policy, systems, and environmental changes that support health equity and a culture of health, both within city government and in the community.

The PIE team achieves this by engaging in the following activities:

- Utilizing data to drive policy and programmatic decisions that improve health outcomes;
- Providing resources and technical support to assist department leadership with decision making including consulting on program data collection, analysis and interpretation as well as program evaluation;
- Developing a framework that is inclusive of internal and external stakeholders to create and implement the department's strategic plan;
- Developing and implementing methods to track progress on departmental and community health goals and objectives as articulated in the Community Health Improvement Plan (CHIP) and Strategic Plan;
- Identifying and collaborating with community partners to improve efficiency and effectiveness of public health efforts;
- Monitoring and analyzing policy initiatives and research at the city, state and federal level and providing policy recommendations;
- Creating and maintaining strategic partnerships with academic institutions to foster workforce development and public health research;
- Providing tools and resources to help elected officials, community residents and other stakeholders understand
 the health challenges faced by Milwaukee residents, including education around the social determinants of
 health and the creation of data dashboards.
- Staffing, coordinating and/or leading public health initiatives.

In addition to the above activities, PIE leads the department's efforts to obtain national public health accreditation, which includes advocating for and maintaining written policies and procedures, driving the community engagement and planning process to draft the city's Community Health Improvement Plan, as well as facilitating various department-wide committees, such as the Quality Improvement Committee, Strategic Planning Committee, Workforce Development Committee, and Data Committee (soon to be the Performance Management Committee). In 2018, PIE assumed responsibility over coordinating city efforts around substance misuse issues and helping craft a policy agenda for city and county stakeholders. Lastly, PIE is tasked with identifying emerging trends and compiling data and information to produce several reports, including the City of Milwaukee Health Department Annual Report, the Community Health Assessment, and the Community Health Improvement Plan – MKE Elevate.

Milwaukee Overdose Response Initiative (MORI): This is a collaboration between MHD and the Milwaukee Fire Department. As part of this initiative, a group of community paramedics, peer support specialists, and individuals providing harm reduction resources will follow up on nonfatal overdoses in Milwaukee and sometimes Milwaukee County. This program idea was initiated by Alderman Murphy in January 2019 when \$100k was allocated to pilot the program (MORI 1.0). The receipt of a new National Association for County and City Health Officials (NACCHO) grant (MORI 2.0) in 2019 allowed the program to expand substantially.

PROGRAM OPERATIONS

Branch:	Policy, Innovation, and Engagement
Established:	2008; Vital Statistics – 1893; Fetal Infant Mortality Review – 1993
2019 Expenses:	
O&M Expenses:	\$467,085
Grant Expenses:	\$89,572
2019 Staffing:	
O&M FTE:	15
Grant FTE:	3
Total FTE:	18

ACTIVE GRANTS

2019 Active Grants	Funder	Grant Period	Amount Over Grant Period
Preventive Health Grant	State of Wisconsin, Department of Health Services	10/1/18- 8/31/19	\$57,900
Preventive Health Grant	State of Wisconsin, Department of Health Services	10/1/19- 9/31/20	\$57,900
Implementing Overdose Prevention Strategies at the Local Level	National Association of County and City Health Officials	11/8/19- 7/31/20	\$734,889

PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019
General Performance					
% of department written policy procedure updated within the required timeframe for PHAB		5%	53%	60%	N/A
# of data dashboards maintained			2	2	2
# of legislative policies consulted on				29	22
# of Common Council Committee presentations				6	11
# of unique Common Council Committee appearances (not including presentations)					97
# of department committees facilitated			4	4	2

Two public dashboards were created in 2017 in an effort to make more health department data available online

PIE leads departmentwide committees to help fulfill accreditation standards and measures. Committees include Workforce Development, Quality Improvement, and Performance Management.

PERFORMANCE MEASURES, Continued

Measure	2015	2016	2017	2018	2019			
Community Health Improvement Plan, MKE Elevate								
# of Steering Committee and Priority Action Team meetings held			4	3	0			
# of organizations actively engaged								
Academic Health Department								
# of active Academic Affiliation Agreements				6	15			
# of student placements at MHD			47		50+			
Departmental and City-Wide Plans Comple	eted							
Community Health Assessment completed within last 5 years		Complete	Complete	Complete	Complete			
Community Health Improvement Plan completed within the last 5 years			Complete	Complete	Complete			
A quality improvement plan reviewed / completed within the last 5 years			Complete	Complete	Complete			
A performance management plan completed within the last 5 years				Drafted	Drafted			
A departmental strategic plan completed within the last 5 years				Drafted	Drafted			
City-County Heroin, Opioid, and Cocaine Report			Drafted	Complete	Complete			
Department Annual Report Completed within first six months		Complete	Complete	Complete	Complete			
Substance Misuse Initiatives								
Number of community convenings				4	3			
Number of prevention efforts implemented				2	3			
Engagement								
# of MHD website hits	68,705	62,271	48,305	40,396	37,584			
# of MHD unique website hits	47,262	44,339	35,815	29,923	28,043			
# of MHD Facebook page followers*				655	1,085			
# of MHD Facebook page engaged users (total # of users who have interacted with the page and its posts)*					9,093			
# of new MHD Twitter followers				143	162			
# of tweets published	0	6	54	110	236			
# of MHD Twitter engagements (total # of times a user interacted with a tweet) *at end of year	331	454	749	3,000	3,368			

Delayed due to necessary prioritization of COVID-19 response efforts in 2020

In October 2019, MHD began hosting monthly Connections to Heal workgroup meetings with community partners in the Substance Use Disorder community

MORI 1.0, MORI 2.0, and an opioid awareness campaign

^{*}at end of year

Vital records are records of life events kept under governmental authority, including birth and death certificates. In Wisconsin, each county seat is authorized as an agent of the State of Wisconsin Vital Records unit. In Milwaukee, there is an additional site housed in the City of Milwaukee Health Department.

The governmental authority is tasked with the safekeeping of Vital Records, effectively providing the State government and the City of Milwaukee government with another source of income through fees. Vital Records operations are governed by Chapter 69 of Wisconsin State Statute.

Vital Statistics issues both certified and uncertified documents. Certified copies are official copies that can be used as a form of identification. Uncertified copies do not have the State seal and cannot be used for identification, for court purposes, etc. There are additional restrictions on who can request/receive a certified document.

The City of Milwaukee Vital Records office has access to birth records for all State of Wisconsin births. We have paper death records for anyone who died at a City resident/institutional address prior to September 2013. We have access to all State of Wisconsin deaths from September 2013 to the present. The office does not have access to marriage or divorce certificates. The office has a Notary Public official on staff. On average, the office takes 550 phone calls each month from customers.

PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019			
Income								
Total gross income, cash receipts, and billing	\$325,172	\$337,948	\$411,965	\$458,679	\$404,584			
Certification and Filing Activities								
Births registered	9,832	9,700	9,700	9,318	9,170*			
Deaths registered	4,279	4,310	4,500	5,928	5,931*			
Customer Services Activities								
Total births and death records	43,608	44,166	54,626	60,100	58,461			
Birth certificates cash sales	9,970	11,222	14,194	15,122	10,755			
Death certificates cash sales	3,457	3,417	2,402	3,158	2,486			
Death certificates via billing to funeral directors	30,181	29,527	38,030	41,820	45,220			

^{*}data is preliminary and will not be finalized until late 2020 $\,$

The Fetal Infant Mortality Review (FIMR) is a process that reviews the circumstances of an infant's life and death to find out what could have been done to prevent the death, promote prevention strategies and goals for community action, and reduce the racial disparity in infant deaths. The guidelines and prevention strategies issued by the FIMR Case Review Team are meant to help keep Milwaukee's infants healthy, safe, and alive. FIMR is made possible through the cooperation of Milwaukee area hospitals, health care providers, social service providers and community agencies through a Memorandum of Understanding with the State of Wisconsin.

The Review Process

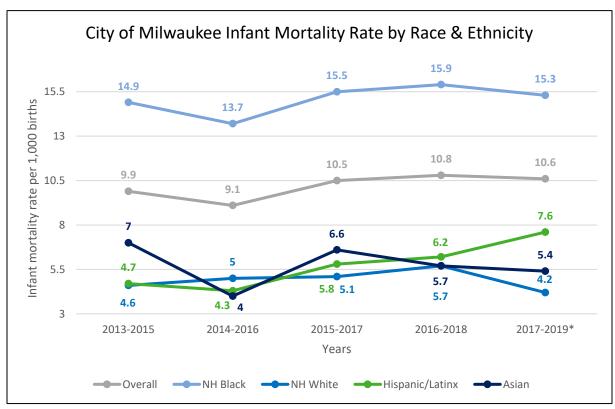
- Case finding through various sources.
- 2. Contact mother/family for possible maternal interview.
- 3. Abstract medical and social service data from all institutions and providers for the period of the pregnancy through postpartum.
- 4. Prepare a Case Narrative and Summary and submit for review to Case Review Team or enter data directly into FIMR database.
- 5. Convene Case Review Team to prioritize recommendations.
- 6. Data and recommendations released to public.
- *Process is fluid and can take up to four years to complete

PERFORMANCE MEASURES

Measure	2015	2016	2017	2018	2019
# of infant deaths	95	89	120	99	77*
Infant mortality rate	9.7	9.2	12.6	10.8	8.4*
# of stillbirths	72	53	52	59	67*
# of reviews completed	6	6	6	5	6
% maternal interviews completed	11%	11%	10%	11%	10% to date
# of partners actively engaged	35	30	38	43	41
% of cases analyzed	100%	100%	100%	100%	2019 not yet completed; will be 100%

^{*}preliminary numbers; will not be reconciled until the end of 2020

POPULATION HEALTH OUTCOMES



*2019 data is preliminary

NH: Non-Hispanic

2019 KEY ACCOMPLISHMENTS

- 1. Facilitated and implemented the department reorganization.
- 2. Launched a Government Alliance for Racial Equity (GARE) committee within the department.
- 3. Received a \$734,000 grant from the National Association of City and County Health Officials to implement an overdose response initiative.
- 4. Established the City of Milwaukee's Board of Health.
- 5. Strengthened relationships with other city departments, including the Department of Public Works and Department of City Development, in implementing Milwaukee's Complete Streets policy.
- 6. Hosted two events addressing opioid and other substance misuse disorders. The events offered free resources, education, Narcan training and distribution, harm reduction services, treatment services, and a free meal.
- 7. Launched an opioid misuse awareness campaign
- 8. Established Connections to Heal Workgroup (October 2019): monthly meetings hosted by the MHD with community partners in the substance use disorder community

2019 KEY CHALLENGES

- 1. Lack of performance management system to help MHD tell our story and advocate for additional funding
- 2. Impact of national anti-immigrant sentiment on local communities- decreased service utilization due to fear which negatively impacts birth outcomes
- 3. Lack of data analytics tools (no statistical software for qualitative data, few software licenses for quantitative data)
- 4. Lack of an Electronic Health Record
- 5. Staff turnover and vacancies in 2019, the PIE branch operated with an approximate 52% vacancy at any given time

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