



**Community Health Needs Assessment  
Community Service Plan  
2022-2024**

1. Counties covered in this assessment and plan  
**Erie County, Niagara County**

2. Participating Local Health Department(s)  
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3. Participating Hospital/Hospital System(s) and contact information  
**Kaleida Health Hospitals:**

**Erie County**

Buffalo General Medical Center/Gates Vascular Institute  
Millard Fillmore Suburban Hospital  
John R. Oishei Children's Hospital

**Niagara County**

DeGraff Medical Park (off-campus Emergency Department supported by Millard Fillmore Suburban Hospital)

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Name of coalition/entity, if any, completing assessment and plan on behalf of participating counties/hospitals:

**Kaleida Health is completing its own assessment and plan in collaboration with the Erie County Department of Health and Niagara County Department of Health and partner organizations.**



**Community Health Needs Assessment  
Community Service Plan  
2022-2024**

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## **Executive Summary**

Kaleida Health is a not-for-profit, Article 28, New York State licensed, healthcare delivery system located in Buffalo, New York and serving the 1.5 million residents of the western region of New York State (NYS), known as Western New York (WNY).

Kaleida Health serves WNY's eight counties of Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans and Wyoming. Erie County and Niagara County comprise an estimated 1.1 million of the WNY total population with the population of Erie County at 954,236 and Niagara County at 212,666 (US Census, Quick Facts April 1, 2020). This Kaleida Health 2022-2024 Community Health Needs Assessment-Community Service Plan (CHNA-CSP) focuses on the location of Kaleida Health's three hospitals including an off-campus Emergency Department, and their primary service areas of Erie County and Niagara County:

### Erie County

- Buffalo General Medical Center/Gates Vascular Institute
- Millard Fillmore Suburban Hospital
- John R. Oishei Children's Hospital

### Niagara County

- DeGraff Medical Park (off-campus Emergency Department supported by Millard Fillmore Suburban Hospital)

Kaleida Health participated in collaborative efforts to develop the 2022-2024 Community Health Assessment-Community Health Improvement Plan (CHA-CHIP) for Erie County and Niagara County as led by the Erie County Department of Health and the Niagara County Department of Health and other hospital and community partners. Erie County partners included the American Heart Association, Buffalo State College (SUNY), Catholic Health System, D'Youville University, Erie County Department of Health, Kaleida Health, New York State Public Health Corps/CSSI for Erie County Department of Health, Population Health Collaborative of WNY, United Way of Buffalo & Erie County and the University at Buffalo (SUNY)

Department of Epidemiology and Environmental Health. Niagara County partners included Catholic Health System - Mount Saint Mary's Hospital and Health Center, Eastern Niagara Hospital, Kaleida Health – DeGraff Medical Park, Niagara County Department of Health, Niagara County Department of Mental Health and Substance Abuse Services and the Population Health Collaborative of WNY.

The collaborative work groups met for several months in 2021 and 2022 to determine community health needs and priorities. They considered data from the County Health Rankings, NYS Prevention Agenda Dashboard, NYS Vital Records, NYS Statewide Planning and Research Cooperative system (SPARCS), NYS Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS), Centers for Disease Control and Prevention (CDC), among others. Community and stakeholder input was obtained through consumer surveys, community conversations and focus group sessions. The needs of low income and underserved populations were prioritized throughout the process. Based on analysis and discussion of community need, the county work groups determined the NYS Prevention Agenda Priority Areas to address for 2022-2024. Kaleida Health has been an active participant in both county work groups.

<b>Erie County and Kaleida Health</b>	
<b>Health Issues of Concern</b>	<b>2019-2024 NYS Prevention Agenda Priority Area</b>
High rates of cardiovascular disease and high incidence of risk factors including high blood pressure, diabetes, obesity and smoking	Prevent Chronic Diseases
Increasing rise of opioid addiction and fatal overdoses	Promote Well-Being and Prevent Mental and Substance Use Disorders
Poor outcomes in maternal and infant health, particularly among underserved populations	Promote Healthy Women, Infants and Children

<b>Niagara County and Kaleida Health</b>	
<b>Health Issues of Concern</b>	<b>2019-2024 NYS Prevention Agenda Priority Area</b>
High rates of cardiovascular disease and high incidence of risk factors including high blood pressure, diabetes, obesity and smoking	Prevent Chronic Diseases
Increasing rise of mental and substance use disorders including opioid addiction and fatal overdoses	Promote Well-Being and Prevent Mental and Substance Use Disorders

Additionally, a Kaleida Health CHNA-CSP steering committee obtained input from key stakeholders from July through October 2022 to discuss the selected county Priority Areas, community need, and the interventions that would best meet those needs. Based on input from the community, collaborative county work groups and internal stakeholders, Kaleida Health selected the focus areas, interventions, and disparities for its 2022-2024 CHNA-CSP, as aligned with the county-focused Priority Areas as indicated below.

### **Prevent Chronic Disease – Erie County and Niagara County**

#### Kaleida Health Focus Areas and Interventions

##### Erie County

- Healthy Eating and Food Security – Community Nutrition Education and Healthy Mobile Food Markets (Disparity – low income population), Worksite Nutrition and Wellness Program
- Preventive Care and Management – Cardiovascular Education and Screening Program in OB-GYN Centers (Disparity – female, Medicaid population), Chronic Disease Education Programs for the Community

##### Niagara County

- Healthy Eating and Food Security – Little Free Pantry (Disparity – food insecure population)
- Preventive Care and Management – Chronic Disease Education Programs for the Community

### **Prevent Mental and Substance Use Disorders – Erie County and Niagara County**

#### Kaleida Health Focus Area and Interventions – Erie County and Niagara County

- Prevent Opioid and Other Substance Misuse and Deaths – MATTERS Buprenorphine and Treatment Referral Program; Availability, Access, Linkage to Opioid Overdose Reversal Medications; Medication and Syringe Drop Boxes in Hospital Emergency Departments and Drug Take-Back Days (Disparity – substance use population)

## **Promote Healthy Women, Infants, and Children – Erie County**

### Kaleida Health Focus Area and Interventions – Erie County

Perinatal and Infant Health – Safe Sleep Initiative, Yomingo® Online Parent Education, Breastfeeding Promotion and Education Program

Kaleida Health is responsible for implementing the interventions identified in this 2022-2024 plan, tracking progress and improvement to evaluate impact, making any mid-course corrections, and reporting progress and results in annual plan updates. Process measures for each intervention are identified in the Work Plan of this CHNA-CSP. Kaleida Health will continue to partner in 2023 and 2024 with the Erie County and Niagara County work groups to assess progress. This Kaleida Health 2022-2024 Community Health Needs Assessment-Community Service Plan is available to the public at <https://www.kaleidahealth.org/community/> under Publications and Resources.

## **We are Kaleida Health**

Kaleida Health’s mission is to “advance the health of its community” and its vision is to “provide compassionate, high-value, quality care, improving health in Western New York and beyond, educating future healthcare leaders and discovering innovative ways to advance medicine.”

Kaleida Health is a not-for-profit, Article 28 New York State (NYS) licensed, healthcare delivery system formed in 1998 with corporate offices located in Buffalo, NY and serving the Western New York (WNY) region of New York State. The system serves over one million patients annually and leads the region with 35.0% market share in 2021.<sup>1</sup> Kaleida Health has close to 10,000 employees, 1,700 affiliated physicians, and its economic impact on the region exceeds \$2.7 billion. It is affiliated with Great Lakes Health System of Western New York, the entity integrating Kaleida Health, Erie County Medical Center (ECMC) and the University at Buffalo (UB). Leading Kaleida Health is Donald N. Boyd, president and CEO, and a 15-member board of directors.

Kaleida Health hospitals include Buffalo General Medical Center/Gates Vascular Institute in Buffalo, NY; Millard Fillmore Suburban Hospital in Williamsville, NY; and John R. Oishei Children’s Hospital in Buffalo, NY. Kaleida Health also operates an off-campus Emergency Department, DeGraff Medical Park in North Tonawanda, NY. The system provides long-term care at HighPointe on Michigan in Buffalo, NY, and the DeGraff Rehabilitation & Skilled Nursing Facility in Tonawanda, NY. Kaleida Health also operates the Visiting Nursing Association of Western New York, a major laboratory division, 80 clinics and healthcare centers, and multiple ambulatory surgery centers operated as physician-hospital joint ventures. In 2017, Kaleida Health became the active parent of Upper Allegheny Health System, which includes Olean General Hospital of Olean, NY, Bradford Regional Medical Center (BRMC) and The Pavilion at BRMC skilled nursing facility of Bradford, PA. These affiliations are part of a transformative initiative to cost effectively preserve essential healthcare services in largely rural WNY communities while assuring linkage to Kaleida Health’s specialty and tertiary healthcare services.

Kaleida Health further serves as a major clinical teaching affiliate of the University at Buffalo’s (UB) Jacobs School of Medicine and Biomedical Sciences, providing clinical training to approximately 700 UB medical students and post-graduate students each year. Through affiliations with a number of educational institutions, the system also provides a clinical experience for healthcare professionals training in the fields of pharmacy, nursing, physician assistant, social work and rehabilitation services. Kaleida Health is committed to providing healthcare for the uninsured and underinsured, offers programs and services in community-based settings and in its campuses and facilities, and works with partnering organizations to further meet the community’s health and social needs. The system works actively with NYS Medicaid Health Homes while also operating Oishei Healthy Kids, a NYS Medicaid Health Home for Children. Kaleida Health’s community benefit programs in 2020 totaled \$177,398,239.

Kaleida Health does not discriminate on the basis of race, color, religion, sex, national origin, disability, sexual orientation, gender identity or expression, physical appearance, source of payment, or age.

## **Kaleida Health Hospitals**

### **Buffalo General Medical Center/Gates Vascular Institute**

Founded as Buffalo General Hospital in 1855 with 100 beds, Kaleida Health’s Buffalo General Medical Center (BGMC) at 100 High Street and the adjoining Gates Vascular Institute (GVI) at 875 Ellicott Street

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<sup>1</sup> Sg2Market Edge (SPARCS), 2021 (not independently verified by KH)

are now a 484-bed acute care hospital with over 3,300 employees located on the Buffalo Niagara Medical Campus (BNMC) in the heart of Buffalo, NY in Erie County. The BNMC is a 120-acre downtown hub for the region's leading healthcare, life sciences, research, and educational institutions. BGMC/GVI is a teaching affiliate of the University at Buffalo's Jacobs School of Medicine and Biomedical Sciences and offers a wide range of clinical inpatient and outpatient care to the residents of Western New York and beyond.

In 2021, BGMC/GVI had 21,901 inpatient discharges and 60,040 outpatient visits. The hospital's state-of-the-art emergency department (ED) is the largest in the region with 29,851 outpatient ED visits recorded in 2021. The emergency department features large private rooms in four separate pods including critical care, sub-acute care, vascular care, and urgent care. In 2021, 25.8% of total patients were Medicaid beneficiaries. Additionally, BGMC/GVI has a helipad to accommodate transport of critically ill patients via medical helicopter, providing 24/7 immediate access to a life-saving intervention or surgery. Specialized programs include cardiac, neurology and vascular services, general surgery (including robotics), bariatrics, orthopedics, urology, pulmonary, colorectal, allergy and immunology, otolaryngology, gynecologic surgery, gastroenterology, rehabilitation medicine, imaging, labs, pathology, mammography screening, among others.

A collaboration between Kaleida Health and the University at Buffalo, the GVI opened in 2012 and brings clinicians and researchers together under one roof. The results have been major breakthroughs in the causes and treatment of cardiac, stroke, and vascular disease, while utilizing state-of-the-art technology and innovative diagnostic treatment options in the care of patients.

### **Millard Fillmore Suburban Hospital**

Kaleida Health's Millard Fillmore Suburban Hospital (MFSH) opened its doors in 1974 at 1540 Maple Road, Williamsville, NY in Erie County. Williamsville is in the Town of Amherst, one of Western New York's (WNY) fastest growing suburbs. Today, the facility is a full service, 265-bed acute care hospital with over 1,800 employees providing a wide array medical and surgical services, both inpatient and outpatient. In 2021, the hospital had 17,816 inpatient discharges, 71,066 outpatient visits, and 28,460 outpatient ED visits. In 2021, 14.1% of total patients were Medicaid beneficiaries. Additionally, the hospital serves as a major clinical teaching affiliate of the University at Buffalo School of Medicine and Biomedical Science.

Services at MFSH include acute care nursing units, ambulatory surgery, cardiology, cardiac non-invasive procedures, GI lab, imaging with 3D Tomosynthesis mammography, interventional radiology, laboratory, obstetrics and gynecology, neonatal care, oncology, palliative care, pulmonary function lab, respiratory therapy, urology suite and vascular lab, women's services, and specialty surgical services including hand surgery, minimally invasive robotic surgery, neurosurgery and orthopedics.

Launched in 2014, the hospital's Survivor Steps program is a supportive cancer rehabilitation and recovery program for survivors of any type of cancer diagnosis with the focus on improving an individual's physical and emotional functioning as well as their quality of life. Survivor Steps is unique in that it can help those throughout their battle with cancer from diagnosis to remission. A 10-bed Level II Neonatal Intensive Care Unit (NICU) specializing in the care of ill or premature newborn infants opened at MFSH in October 2015.

### **John R. Oishei Children's Hospital**

Kaleida Health's John R. Oishei Children's Hospital (OCH) is a state-of-the-art, freestanding children's hospital located at 818 Ellicott Street, Buffalo, NY in Erie County. Opened in November 2017, it is located on the Buffalo Niagara Medical Campus and connected to Buffalo General Medical Center and the Gates Vascular Institute. The hospital dates back to 1892 and was previously located at 219 Bryant Street as Women & Children's Hospital of Buffalo. A 185-bed facility with over 1,600 employees, OCH is a regional center for comprehensive pediatric, neonatal, surgical, perinatal and obstetric services as well as a



teaching hospital for the University at Buffalo's Jacobs School of Medicine and Biomedical Science. In 2021, OCH had 11,899 inpatient discharges, 112,561 outpatient visits, and 38,586 outpatient ED visits. In 2021, 63.8% of total patients were Medicaid beneficiaries. OCH services include emergency, inpatient, outpatient, and surgical services in the areas of pediatric, neonatal, surgical, perinatal, and obstetrical. Specialty areas include general and thoracic surgery, adolescent medicine, allergy/immunology, dermatology, ear/nose/throat, endocrinology/diabetes, epilepsy, gastroenterology, genetics, hematology/oncology, infectious diseases, labor and delivery, neonatology, nephrology, neurology, ophthalmology, orthopedics, pulmonology, rheumatology, urology, trauma, sexual assault treatment, among others.

UCH has the only NYS Regional Perinatal Center for WNY, the only Level IV Neonatal Intensive Care Unit and the only Level I Pediatric Trauma Unit serving the region, and a Pediatric Intensive Care Unit. The hospital has a helipad for emergency transport of sick or injured children. Its outpatient specialty care clinics in the new Oishei Children's Outpatient Center provide services to children with special healthcare needs through the hospital's Robert Warner Rehabilitation Center and the Children's Guild Foundation Autism Spectrum Disorder Center. Additionally, UCH operates a child psychiatry clinic, two pediatric primary care clinics and two OB-GYN clinics, and is home to Oishei Healthy Kids, a NYS Medicaid Health Home Serving Children, Children's Healthy Weight of Buffalo, Craniofacial Center of WNY, Early Childhood Direction Center, Lead Poisoning Prevention Resource Center, Safe Babies New York, Sickle Cell & Hemoglobinopathy Center of WNY, and the Youth Link Program addressing pediatric HIV.

### **DeGraff Medical Park**

Kaleida Health's DeGraff Medical Park (DeGraff), located at 445 Tremont Street, North Tonawanda, NY in Niagara County was established in 1914 to serve the healthcare needs of WNY's Northtown communities. In 2020, inpatient care at DeGraff Memorial Hospital ceased and the hospital was renamed DeGraff Medical Park. The facility now operates as an Off-Campus Emergency Department (ED) supported by Kaleida Health's nearby Millard Fillmore Suburban Hospital. In addition to emergency care, DeGraff services include: laboratory services/blood draw; X-ray; CAT scan; ultrasound, fluoroscopy and bone density scanning; physical, occupational and speech therapies and cardiac rehabilitation. The campus also houses the DeGraff Rehabilitation & Skilled Nursing Facility, a U.S. Center for Medicare and Medicaid Services five star facility including 60-bed skilled nursing beds and a 20 bed sub-acute rehabilitation unit for short-term stay. In 2021, DeGraff board certified emergency medicine physicians and specially trained nurses provided comprehensive care to 14,028 patients in its state-of-the-art emergency department. An additional 12,227 patient received outpatient care services. In 2021, 24.6% of DeGraff patients were insured through Medicaid.

Due to declining inpatient admissions, inpatient and outpatient surgery over the last few years, DeGraff experienced declining revenue and operational challenges. In 2017, the hospital announced its DeGraff 2020 plan to right size inpatient care with a strengthened focus on emergency department access and outpatient services. In 2018, in response to community need, DeGraff expanded and renovated its emergency department from 4,800 square feet to approximately 10,000 square feet. The new, modern, technology-based emergency department has a physical layout that maximizes the delivery of patient-focused care and allows for better access, parking and visibility for patients, families and visitors.

Located on the border of Erie and Niagara Counties and five miles from Buffalo, DeGraff's team of skilled health care professionals are committed to providing high quality, personalized care. Dedicated to excellence with its state-of-the-art Emergency Department, DeGraff physicians and staff, continually ranks among the best in the delivery of overall patient satisfaction. As part of Kaleida Health, the largest health care provider in WNY, DeGraff's identity has evolved to better serve the community's common healthcare needs of today, while maintaining the gateway to advanced care when required.

## Caring for the Underserved

### Diversity, Equity and Inclusion

Kaleida Health is committed to advancing the health of our community. The integration of diversity, equity, and inclusion into all areas of our work, culture, and community will be vital to carrying out our mission. The vision of diversity, equity, and inclusion at Kaleida Health is to be a model healthcare provider by valuing, fostering, and leveraging diversity and inclusion to advance the health of Western New York, within a work environment that is safe, inclusive, positive, and representative of our greater community and beyond. There are four main goals, with a variety of initiatives relating to each of them to fulfill our mission and vision:

- **Diversity:** Increase diversity within the company to promote diversity of thought, varying perspectives, and innovation.
- **Inclusion:** Create an inclusive culture where everyone feels welcomed, respected, and heard because people are welcoming, respectful, and listening. The practice of these behaviors will enhance innovation, maximize each employee's potential, and increase retention of employees.
- **Community:** Further our vision beyond Kaleida by deepening our relationships and extending trust in the Western New York Community.
- **Equity:** Strengthen Kaleida's core value to CARE: remain centered around the patient, be accountable to patients and each other, show respect and integrity, and provide excellence in all we do.

In November 2020, Kaleida Health hired its first ever Diversity and Inclusion Officer and established the Diversity, Equity and Inclusion (DEI) Department to lead the organization's efforts to integrate diversity, equity and inclusion throughout the health system. We empowered every member of our workforce – which includes more than 10,000 employees and nearly 1,700 providers – to take responsibility for finding ways to weave DEI into the fabric of our culture and holding ourselves and others accountable to equitable and inclusive behaviors and processes. Our first step was to form a DEI Executive Steering Council that includes all executive leaders and site presidents and led by our Chief Diversity and Inclusion Officer.

In 2021, Employee Resource Groups (ERG) were established; Diversity, Inclusion, Race, and Equity (DIRE), Sexual And Gender Equity (SAGE) also known as the LGBTQ+ ERG, Veteran and Family ERG, and Working Parents and Caregivers. Kaleida Health encourages the formation of ERGs to help maintain a culture where all employees and providers feel they belong. Equally important, through innovations from our ERGs, we are better able to provide appropriate care to the diverse populations we serve, identify and eliminate health disparities, and enhance the patient experience.

In 2021, the DEI department built a mandatory education series for all Kaleida Health employees. The goal of the series is to educate the workforce on cultural competency and humility along with understanding how DEI integrates into achieving Kaleida Health's mission to advance health in our community. Furthermore, the series helps employees to understand biases and ways to foster an inclusive environment for patients, visitors and colleagues.

In 2022, The DEI Department focused on three major areas:

- Development and education of a system-wide Employee Equity Dashboard
- Improving Birth Equity through DEI education and uplifting patient voice, especially Black, Indigenous, People of Color (BIPOC) patients who have the worst maternal health outcomes across New York State.

- Development of an Equity Impact Assessment tool to better integrate diversity, equity and inclusion into decision making processes.

The Chief Diversity and Inclusion Officer has made a commitment to focus efforts towards racial and health equity. Kaleida Health recognizes that racism negatively impacts and exacerbates health inequities among historically marginalized communities. Kaleida Health is committed to the work of racial equity and health equity for both our staff members and the communities we serve.

#### Financial Counseling

Kaleida Health has initiatives in place to assist individuals to access affordable health care. Through its Financial Counseling program, counselors are available at Kaleida Health facilities to support patients who are uninsured/underinsured and in need of financial assistance. The counselors assist and advocate for the patient to enroll them in appropriate medical coverage including Medicaid and Child Health Plus. Charity care is also available to for those patients who have incurred a financial hardship and do not have the resources to reimburse Kaleida Health for services rendered. These programs are based income and asset verification.

Medicaid provides health insurance for low-income individuals and a high percentage of Medicaid patients are provided health care services at Kaleida Health hospitals. In 2021, of the total inpatient discharges, emergency department visits, and outpatient visits for all four hospitals, 37.2% were Medicaid. See below table.

<b>Kaleida Health Hospitals - YTD 2021 Total Inpatient Discharges, Outpatient Visits, Outpatient Emergency Department Visits (Kaleida Health – EPSI FY2021) *Does not include other Kaleida Health non-hospital services.</b>					
	<b>Buffalo General Medical Center</b>	<b>John R. Oishei Children's Hospital</b>	<b>Millard Fillmore Suburban Hospital</b>	<b>DeGraff Memorial Hospital</b>	<b>Total Kaleida Health Hospitals</b>
<b>Medicaid</b>	29,547	105,735	16,751	6,558	158,591
<b>All Payers</b>	114,341	165,857	119,124	26,653	425,975
<b>% Medicaid</b>	25.8%	63.8%	14.1%	24.6%	37.2%

#### NYS Medicaid Health Home Alignment

In 2016, John R. Oishei Children's Hospital (OCH) established a NYS Medicaid Health Home Serving Children named Oishei Healthy Kids to provide care management to Western New York children with Medicaid who have complex physical and/or behavioral health conditions. Oishei Healthy Kids is now a case management agency aligned under the Children's Health Home of Upstate New York to solely focus on serving the at-risk pediatric and adolescent population in the Western New York community and within the Kaleida Health network. Currently, 603 children are enrolled in the program and 10 children are in the outreach phase. Oishei Healthy Kids also continues to provide healthcare services to medically underserved children in Buffalo Public Schools through its seven School Based Health Centers.

#### MedLaw Partnership

Kaleida Health partners with the MedLaw Partnership of WNY, a medical-legal partnership, that offers patients legal expertise and services at no charge to address patients' health-related social needs. The service offers a range of advice and counsel in matters such as income maintenance, health insurance,

housing and utilities, employment issues, legal status, health care proxy, power of attorney, simple wills, family issues, consumer issues, mortgage foreclosure, and more. Patients of Buffalo General Medical Center, Gates Vascular Institute, John R. Oishei Children's Hospital of Buffalo, and HighPointe on Michigan are eligible for services. Doctors, nurses and care providers at partner facilities are encouraged to refer patients in need of legal assistance to the MedLaw Partnership. In 2021, the MedLaw Partnership of WNY assisted with 190 referrals. Kaleida Health is part of a growing list of over 450 hospitals and healthcare centers in 49 states to implement a medical-legal partnership.

#### Language Assistance

Through its Language Assistance Service program, Kaleida Health provides interpreting and translation services to Limited English Proficient (LEP) patients. Every patient or patient representative with a communication barrier who enters a Kaleida Health facility is advised of her or her right to Language Assistance Services, and the service is provided free of charge.

#### Visiting Nursing Association of WNY

The Visiting Nursing Association of WNY, Inc., Kaleida Health's home care affiliate, also works to promote the health of the community. This includes educating chronic care patients on self-management and personal care in areas such as rehabilitation services, nutrition education and therapy, infection control, falls risk assessment and intervention, depression risk assessment and intervention and health education related to improved lifestyle choices for individuals and families in their homes and the community. In 2021, 479,453 visits were recorded for VNA home care services.

#### Community Health Services

Kaleida Health's Community Health Services provides outreach and health education programs, speakers on health-related topics, and community referrals to people of all ages. Programs and events promote the reduction of health disparities, effective use of health services, and promote overall community health and wellness. Topics range from health insurance enrollment to diabetes, stroke, heart disease, maternal and child health, and health career exploration. In 2020 and 2021, COVID-19 restrictions limited Kaleida Health's ability to provide the same comprehensive program of community outreach and education it had in previous years. However, working around the pandemic surge, in 2021, Kaleida Health partnered with various organizations and participated in 83 in-person and virtual events to reach 12,439 individuals with community service programming. All of the outreach programs are free and reach cross section of cultures, ethnicities, economic demographics, languages, religions and all genders including LGBTQ+ community. Materials provided to the community during 2021 outreach events included: information on free PSA screenings; breast, prostate and colon cancer; stroke prevention; diabetes prevention; heart disease and risk factors; children's health; bariatric services/obesity/BMI; family planning; HPV/ STD/STI; children's Medicaid health homes; nutrition; women's health; maternity including breastfeeding, among other topics.

Kaleida Health community outreach extended throughout its service area and primarily in the City of Buffalo, a city with a poverty rate of 28.3% and a high minority population with 35.2% Black/African American and 12.2% Hispanic (US Census 2020). Buffalo has several census tracts that are federally designated as Medically Underserved Areas and Health Professional Shortage Areas. In-person and virtual outreach in Buffalo including Buffalo Public Schools and charter schools, NAACP, Head Start, Every Person Influences Children, UB Education Opportunity Center, Buffalo Federation of Neighborhood Centers, Broadway Market, Near East Side & West Side Task Force, churches, block clubs, among others.

Kaleida Health further engaged in cancer screening initiatives through collaborations with Great Lakes Cancer Care Collaborative and Western New York Urology. PSA colon cancer screenings were held in

communities where NYS data identified zip codes with high levels of cancer and health disparities and included the following: Mount Moriah Baptist Church, Men's Program & Community Wellness Fun Day – Buffalo; Mount Olive Baptist Church, East Delevan – Buffalo; Amherst Senior Center, NYS Senator Rath Family Health Fair – Amherst; Macedonia Baptist Church – Buffalo and WUFO 1080 AM/Power 96.5 FM – Buffalo.

Additionally, the Great Lakes Health radio program hosted by Kaleida Health, aired two times per month in 2021 on WUFO 1080 AM/Power 96.5 FM and featured 30 minute interviews with guest speakers including physicians, nurses and other health professionals on a variety of health and wellness topics. A Senior Moment Program also aired on Power 96.5 FM and featured 30 minute interviews with guest speakers on health and wellness topics for ages 60+. In 2021, listenership was 81,600 for the Great Lakes Health Program and 20,400 for the Senior Moment Program. These programs reach a predominately urban population of, all ages, races, sexual orientations, and ethnic groups in Western New York, and may also be accessed across the country through [www.power965radio.com](http://www.power965radio.com) or Google WUFO 1080 AM, Buffalo, NY or Google Power 96.5FM, Buffalo, NY.

A Buffalo Public School, Math Science Technology (MST) High School Speaker Series was held virtually and in-person as permitted during COVID-19. Kaleida Health employees shared their knowledge and experiences on their careers with high school students preparing for college and careers as Certified Nursing Assistants (CNAs). MST is located in a primarily African American community in zip code 14215, a neighborhood with high rates of health disparities, unemployment, and underemployment and is a food desert. In 2021, 10 Kaleida Health speaker presentations, in person and virtual were conducted for the MST CNA program. Throughout 2022-2024, Kaleida Health will continue to provide outreach and community programs and events across Western New York, including Buffalo, a city with a high poverty rate of 28.3% and several census tracts federally designated as Medically Underserved Areas.

In addition to the services outlined above, Kaleida Health incorporates “caring for the underserved” in all of its facilities and services and through the work of its dedicated employees, physicians and volunteers.

## Community Served

Kaleida Health serves Western New York's (WNY) eight counties of Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans and Wyoming. The population for the region is approximately 1.5 million with Erie County and Niagara County comprising just under 1.2 million of this total. Kaleida Health has three hospitals located in Erie County including Buffalo General Medical Center, John R. Oishei Children's Hospital, and Millard Fillmore Suburban Hospital and its DeGraff Medical Park located in Niagara County. In 2021, Kaleida Health market share for Erie County was 43.66% and for Niagara County was 36/35%.<sup>2</sup> Erie County and Niagara County are the focus of this Kaleida Health 2022-2024 Community Health Needs Assessment-Community Service Plan (CHNA-CSP) as they are the WNY counties identified as primary service areas for Kaleida Health hospitals. **Primary service area is defined in below tables as the county with the highest percentage of all WNY counties for each facility's total 2021 inpatient discharges, outpatient emergency department (ED) visits and outpatient visits. See next page for map indicating Kaleida Health's hospital locations and the primary and secondary service areas.**

**Erie County - Hospital Location and Primary Service Area**

<b>Buffalo General Medical Center – 2021 Inpatient Discharges, Outpatient Emergency Department (ED) Visits, Outpatient Visits (Kaleida Health, EPSI, FY2021)</b>			
2021	WNY 8 County Total No.	Erie County No.	% of Total
Inpatient Discharges	21,901	16,919	77.3%
Outpatient ED Visits	29,851	27,787	93.1%
Outpatient Visits	60,040	49,003	81.6%

<b>Millard Fillmore Suburban Hospital – 2021 Inpatient Discharges, ED Visits, Outpatient Visits (Kaleida Health, EPSI, FY2021)</b>			
2021	WNY 8 County Total No.	Erie County No.	% of Total
Inpatient Discharges	17,816	13,169	73.9%
Outpatient ED Visits	28,460	23,335	82.0%
Outpatient Visits	71,066	55,470	78.1%

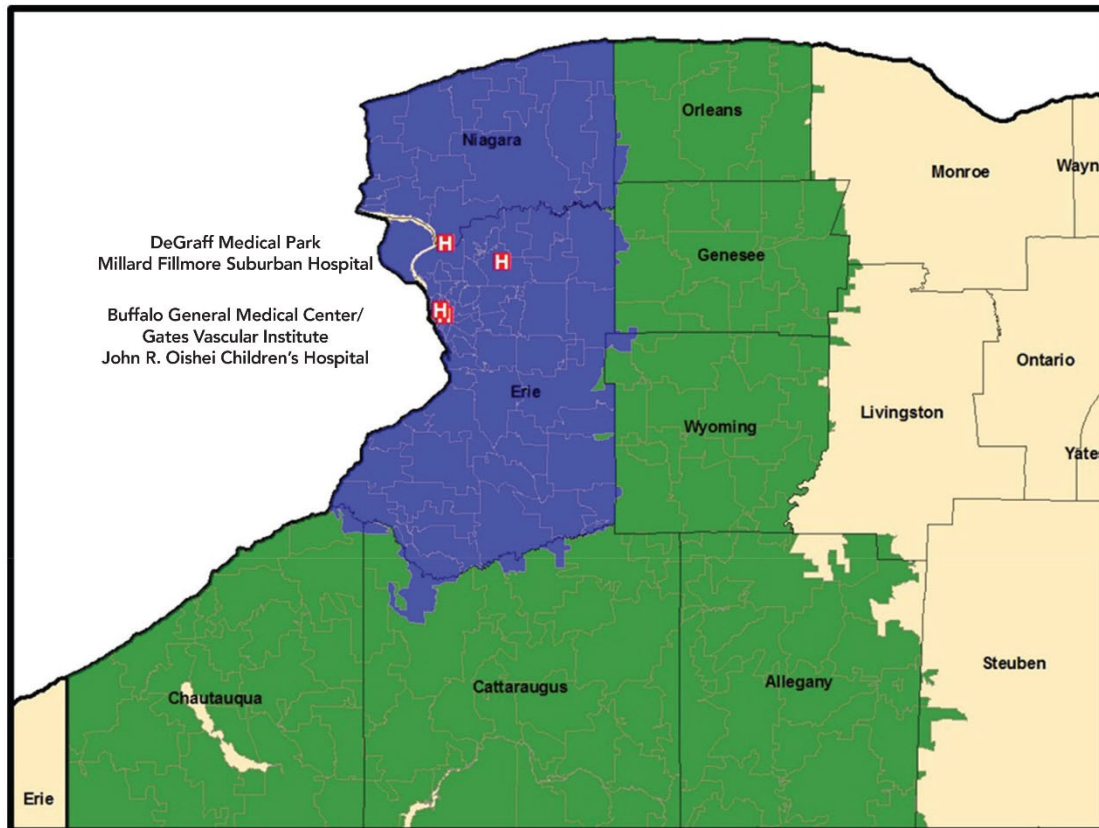
<b>John R. Oishei Children's Hospital – 2021 Inpatient Discharges, ED Visits, Outpatient Visits (Kaleida Health, EPSI, FY2021)</b>			
2021	WNY 8 County Total No.	Erie County No.	% of Total
Inpatient Discharges	11,899	9,264	77.9%
Outpatient ED Visits	38,586	33,159	85.9%
Outpatient Visits	112,561	89,798	79.8%

<b>DeGraff Medical Park – 2021 Inpatient Discharges, ED Visits, Outpatient Visits (Kaleida Health, EPSI, FY2021)</b>			
2021	WNY 8 County Total No.	Niagara County No.	% of Total
Inpatient Discharges	7	6	85.7%
Outpatient ED Visits	14,028	6,800	48.5%
Outpatient Visits	12,227	6,380	52.2%

<sup>2</sup> Sg2 Market Edge (SPARCS) (not independently verified by KH)

## Map of Western New York by County

Kaleida Health's Primary Service Area (blue) and Secondary Service Area (green)



### Demographics and Population – Erie County

Erie County is located in the western portion of New York State bordering Lake Erie, and lies on the international border between the United States and Canada. It includes a total area of 1,227 square miles, of which 1,043 square miles is land and 184 square miles is water.<sup>3</sup> Erie County is largely an urban county with the majority of the population living within its cities and surrounding suburban communities. There is also a significant rural population that resides outside of the first and second ring suburban areas of the county's largest city of Buffalo.

Erie County's total 2020 population is 954,236. There are three cities in Erie County including Buffalo, population 278,349; Lackawanna, population 19,949; and Tonawanda, population, 15,129. Buffalo is the second largest city in the state and the largest city in the region and serves as the county seat. In addition, there are 16 villages, 25 towns, and two Native American Indian reservations within the county, including the Tonawanda Reservation in the northeastern part of the county in the town of Akron and the Cattaraugus Reservation in the southwestern part of the county bordering Cattaraugus County. The town

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<sup>3</sup> Wikipedia, Erie County

of Amherst is one of the county's largest towns in Erie County with a population of 129,595.<sup>4</sup>

Buffalo is home to Kaleida Health's Buffalo General Medical Center/Gates Vascular Institute and John R. Oishei Children's Hospital and Amherst is home to Kaleida Health's Millard Fillmore Suburban Hospital.

**Below table identifies key population characteristics of the City of Buffalo, City of Lackawanna, Town of Amherst, Erie County and all of New York State.**

<b>Population Demographics for Buffalo, Lackawanna, Amherst, Erie County, New York State (US Census, Quick Facts April 1, 2020)</b>					
<b>Descriptive</b>	<b>Buffalo</b>	<b>Lackawanna</b>	<b>Amherst</b>	<b>Erie County</b>	<b>New York</b>
<b>Population Total</b>					
Population Estimates	278,349	19,949	129,595	954,236	<b>20,201,249</b>
<b>Age</b>					
Persons under 5 years	6.6%	8.1%	5.1%	5.5%	5.8%
Persons under 18 years	22.4%	24.2%	19.9%	20.2%	20.7%
Persons 65 years and over	13.0%	15.1%	20.9%	18.4%	16.9%
<b>Race or Ethnicity</b>					
White alone	47.1%	78.1%	78.6%	79.3%	69.6%
Black or African American alone	35.2%	13.1%	6.5%	14.0%	17.6%
American Indian and Alaska Native alone	0.5%	0.3%	0.4%	0.7%	1.00%
Asian alone	5.3%	0.2%	10.2%	3.8%	9.0%
Hispanic or Latino	12.2%	7.0%	4.4%	5.8%	19.3%
<b>Income &amp; Poverty</b>					
Median Household Income (in 2020 dollars) 2016-2020	\$39,677	\$39,984	\$76,781	\$59,464	\$71,117
Persons in Poverty	28.3%	25.4%	9.8%	13.2%	12.7%
<b>Housing (2016-2020)</b>					
Owner-occupied housing unit rate	41.5%	54%	69.8%	64.8.0%	54.1%
Median value of owner-occupied housing units	\$101,000	\$99,400	\$216,300	\$160,700	\$325,000
Median gross rent	\$801		\$1,124	\$852	\$1,315
<b>Families &amp; Living Arrangements (2016-2020)</b>					
Households	110,896	7,443	50,928	392,910	7,417,224
Language other than English spoken at home, percent of persons age 5 years+	18.6%	20.8%	16.2%	10.8%	30.3%
<b>Education (2016-2020)</b>					
High School Graduate or Higher, percent of persons age 25+	85.7%	83.2%	94.9%	92.0%	87.2%
Bachelor's Degree or Higher, percent of persons age 25+	28.6%	17.0%	56.2%	35.1%	37.5%
<b>Health</b>					
With a disability, under age 65 years, 2016-2020	13.5%	13.4%	5.8%	9.5%	8.7%
Persons w/o Health Insurance, under 65	4.9%	5.2%	2.5%	4.1%	6.1%

Disparities exist throughout Erie County and particularly in the city of Buffalo. While 79.3% of the population of Erie County is white, 69.6% of the total New York State population is white, and 47.1% of the population of Buffalo is white. Buffalo has a high minority population with 35.2% of its residents being African American and 12.2% Hispanic as compared to all of Erie County with 14.0% being African American

<sup>4</sup> US Census, Quick Facts April 1, 2020



and 5.8% Hispanic or Latino. New York State's African American population is 17.6% and its Hispanic population is 19.3%. The Town of Amherst has a significant Asian population of 10.2% while the Asian population in Erie County is just 3.8%.<sup>5</sup>

Erie County has had an influx of foreign-born and refugees settling in the area throughout the last 10 years. From 2000 to 2010, the Buffalo-Niagara Metropolitan Area saw a 33% rise in its foreign-born population, growing from 4.4% of the total population in 2000 to 6.0% in 2010. From 2003 to 2013, Erie County resettled 9,723 refugees. In 2016, of the 5,028 refugees resettled in New York State, 1,361 or 34% resettled in Erie County. Buffalo is home to a majority of these refugees. The top 14 countries of origin for immigrants and refugees in Erie County from 2008 to 2016 include Afghanistan, Burma, Bhutan, Burundi, Congo, Democratic Republic of Congo, Cuba, Ethiopia, Eritrea, Iraq, Iran, Somalia, Sudan, and Syria.<sup>6</sup> The 2020 Census indicates that 10.8% of Erie County residents speak a language other than English at home, age 5+ years, 2016-2020, as compared to 18.6% in Buffalo.<sup>7</sup> In 2020-2021, among Buffalo Public School students, there were 5,368 students enrolled English as a New Language (ELL) students comprising 18% of the district's total enrollment. In addition to language barriers, it is important to note that 95% of Buffalo's ELL students are economically disadvantaged and 20% have disabilities.<sup>8</sup> Many are refugees with societal and cultural differences, with several having experienced trauma and other hardships.<sup>9</sup> Lackawanna, just south of Buffalo, is home to a large Yemen community, many of whom do not speak English. 20.8% of Lackawanna residents speak a language other than English at home (age 5+ years), 2016-2020.<sup>10</sup>

The 2020 median household income in Buffalo is \$39,677, and comparably \$39,984 in Lackawanna while the median household income in Erie County is \$59,464 and in New York State, it is \$71,117. While Erie County's 2020 poverty rate is 13.2%, Buffalo's poverty rate is 28.3% and Lackawanna's poverty rate is 25.3%.<sup>11</sup> According to the 2019 US Census, American Community Survey Buffalo has the third highest overall poverty rate among major US cities, just behind Detroit with 30.6% and Cleveland with 30.8%; and the second highest childhood poverty rate (under 18 years) at 43.4%, 2<sup>nd</sup> to Cleveland with 46.1%.<sup>12</sup>

Unemployment in the region was at an all-time high in 2020 due to the economic effects of the COVID-19 pandemic. The New York State Department of Labor reports the April 2020 unemployment rate for Erie County was 21% and decreased to 6.0% by April 2021 and 3.5% in April 2022.<sup>13</sup>

There are other economic variances throughout the county. The median value of owner-occupied housing units (2016-2020 in 2020 dollars) is \$101,000 in Buffalo, \$99,400 in Lackawanna, \$216,300 in Amherst and \$160,700 in Erie County as compared to \$320,000 in New York State. The owner-occupied housing unit rate in the city of Buffalo is 41.5%, 54% in Lackawanna while the rate in Erie County is 64.8%, and the rate in Amherst is 69.8%.<sup>14</sup>

Educational attainment in the high-poverty communities such as Buffalo and Lackawanna is also a challenge. In Erie County, 92% of persons age 25+ are high school graduates or higher while the rate is 85.7% in Buffalo and 83.2% in Lackawanna (2016-2020). In Erie County, 35.1% of persons age 25+ have a bachelor's degree or higher while the rate is 28.6% in Buffalo and 17% in Lackawanna (2016-2020).

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<sup>5</sup> US Census, Population April 1, 2020, Race and Hispanic Origin

<sup>6</sup> Buffalo Brief, February 2018; Immigrants, Refugees and Languages Spoken in Buffalo

<sup>7</sup> US Census, Quick Facts as of April 1, 2020

<sup>8</sup> 2021, Buffalo City School District - English Language Learners Data | NYSED Data Site, - <https://data.nysed.gov/>

<sup>9</sup> Buffalo Brief, February 2018; Immigrants, Refugees and Languages Spoken in Buffalo

<sup>10</sup> US Census, Quick Facts as of April 1, 2020

<sup>11</sup> US Census, Quick Facts as of April 1, 2020

<sup>12</sup> Buffalo Business First, Scott Thomas, 9/25/2020, Buffalo is now second worst in Child Poverty.

<sup>13</sup> NYS Department of Labor, Labor Force and Unemployment Data

<sup>14</sup> US Census, Quick Facts as of April 1, 2020

Furthermore, the Buffalo Public School District's 2021 four-year high school graduation rate is 79%, a significant improvement over the 63.9% rate in 2018. However, poverty and racial disparities are evident throughout its 29,629 students with 81% of students economically disadvantaged( Economically disadvantaged students are those who participate in, or whose family participates in, economic assistance programs, such as the free or reduced-price lunch programs, Social Security Insurance (SSI), Food Stamps, Foster Care, Refugee Assistance (cash or medical assistance), Earned Income Tax Credit (EITC), Home Energy Assistance Program (HEAP), Safety Net Assistance (SNA), Bureau of Indian Affairs (BIA), or Family Assistance: Temporary Assistance for Needy Families (TANF). If one student in a family is identified as low income, all students from that household (economic unit) may be identified as low income) and 81% represent a minority population. In Lackawanna, 85% of its 1,812 students are economically disadvantaged and 36% represent a minority population.<sup>15</sup>

The Affordable Care Act and New York State of Health have helped to increase the number of individuals with health insurance throughout Erie County. The rate of persons under 65 years without health insurance in the City of Buffalo was 7.4% in 2018 and decreased to 4.8% in 2020. The 2020 uninsured rate among those under 65 years is 5.2% for Lackawanna, 2.5% for Amherst 4.1% for Erie County, while the New York State rate is 6.1%.<sup>16</sup> The percentage of individuals (any age) with public health insurance coverage in 2020 is 54.8% for Buffalo, 40.0% for Erie County and 39.2% for New York State.<sup>17</sup> Access to a regular source of care is a concern among the uninsured and underinsured as well as the general population given provider shortages throughout the region. In Erie County, the primary care provider rate is 1,250:1 and the Niagara County rate is 2,430:1 as compared the New York State (NYS) rate of 1,180:1. The mental health provider rate for Erie County is 280:1 while the rate for Niagara County is 720:1 and the rate for NYS is 310:1.<sup>18</sup>

In Erie County, 83.9% of adults 18 years and over, age-adjusted, have a usual source of health care while 16.1% do not have a usual source of health care. The percentage of adults who did not receive health care because of cost is 11.0% in Erie County and 11.3% for New York State.<sup>19</sup> The percentage of children who have had the recommended number of well child visits in government sponsored insurance programs in Erie County is 73.5% while the NYS rate is 75.2%.<sup>20</sup> Mobility and transportation issues may further contribute to lack of access to healthcare services. The rate of individuals with a disability (under age 65 years) in the City of Buffalo, a city of significant poverty, is 13.5% while the rate throughout Erie County is 9.5% and the rate in the more affluent Town of Amherst is just 5.8%, and the NYS rate is 7.5%.<sup>21</sup> US Census, April 1, 2020

The rate of persons with an ambulatory difficulty in Erie County is 7.1% and the NYS rate is 8.7%. Persons with an ambulatory difficulty, such as serious difficulty walking or climbing stairs, may be limited in their physical activity and may have unique requirements for accessibility, such as ramps or elevators. Individuals in urban areas may have access to public transportation options, but mobility issues may still be a challenge. Lack of a privately owned vehicle challenges all populations in accessing healthcare services. The rate of occupied housing units with no vehicles is 12.5% in Erie County, and 9.869.8% in Niagara County.

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<sup>15</sup> 2021, Buffalo City School District, NYSED Data Site - <https://data.nysed.gov/>

<sup>16</sup> US Census, Quick Facts as of April 1, 2020

<sup>17</sup> US Census 2020, American Community Survey 5-Year Estimates Data Profile

<sup>18</sup> 2022 County Health Rankings

<sup>19</sup> NYS CHIRS – Expanded Behavioral Risk Factor Surveillance System data as of December 2020

<sup>20</sup> NYS Medicaid & Child Health Plus data as of November 2021

<sup>21</sup> US Census, Quick Facts as of April 1, 2020

## Demographics and Population – Niagara County

Niagara County is located in the western portion of New York State (NYS), just north of Buffalo (Erie County) and adjacent to Lake Ontario on its northern border and the Niagara River and Canada on its western border. The county has a total area of 1,140 square miles, of which 522 square miles is land and 617 square miles is water. The county's total population is 212,666 and is comprised of urban, suburban, and a significant rural population. Its cities include Niagara Falls with a population of 48,671, North Tonawanda with a population of 30,496, and its county seat of Lockport with a population of 20,876.<sup>22</sup> North Tonawanda is home to Kaleida Health's DeGraff Medical Park of Millard Fillmore Suburban Hospital. **The table below identifies key population characteristics of Niagara County and the cities of Niagara Falls, North Tonawanda, Lockport and all of New York State.**

Population Demographics for Niagara Falls, North Tonawanda, Lockport, Niagara County, New York State (US Census, Quick Facts, April 1, 2020)					
Descriptive	Niagara Falls	Lockport	North Tonawanda	Niagara County	New York State
<b>Population Total</b>					
Population Estimates	48,671	20,876	30,496	212,666	<b>20,201,249</b>
<b>Age</b>					
Persons under 5 years	6.7%	5.5%	4.7%	5.3%	5.8%
Persons under 18 years	21.0%	23.0%	16.4%	19.9%	20.7%
Persons 65 years and over	17.6%	15.6%	19.2%	19.5%	16.9%
<b>Race or Ethnicity</b>					
White alone	69.4%	80.4%	95.1%	87.5%	69.6%
Black or African American alone	20.0%	10.8%	1.2%	7.4%	17.6%
American Indian and Alaska Native	1.0%	0.8%	0.4%	1.2%	1.0%
Asian alone	1.5%	1.1%	0.4%	1.1%	9.0%
Hispanic or Latino	5.8%	3.7%	1.5%	3.3%	19.3%
<b>Income &amp; Poverty</b>					
Median Household Income (in 2017 dollars) 2016-2020	\$41,137	\$46,706	\$60,673	\$57,252	\$71,117
Persons in Poverty	23.5%	14.2%	10.2%	11.7%	12.7%
<b>Housing (2016-2020)</b>					
Owner-occupied housing unit rate	58.6%	55.5%	69.9%	71.7%	54.1%
Median value of owner-occupied housing units,	\$78,500	\$95,600	\$129,200	\$131,600	\$325,000
Median gross rent	\$649	\$731	\$735	\$714	\$1,315
<b>Families &amp; Living Arrangements (2016-2020)</b>					
Households	22,330	9,113	13,870	90,022	7,417,224
Language other than English spoken at home, persons 5+ years	6.8%	5.4%	3.3%	4.8%	30.3%
<b>Education (2016-2020)</b>					
High School Graduate or Higher, percent of persons age 25+	88.4%	89.7%	93.1%	91.5%	87.2%
Bachelor's Degree or Higher, percent of persons age 25+	19.8%	23.6%	26.5%	25.6%	37.5%
<b>Health</b>					
With a disability, under age 65 years, 2016-2020	13.0%	12.3%	11.5%	10.2%	7.6%
Persons w/o Health Insurance, under 65	4.3%	5.9%	2.8%	4.3%	6.1%

Disparities exist throughout Niagara County including its small cities and rural areas. While most of Niagara County is white (87.5%), a high percentage of historically, underserved minority populations reside in Niagara Falls given that 20.0% of residents are black-African American. 4.8% of Niagara County

<sup>22</sup> Wikipedia, Niagara County

households speak a language other than English at home (5+ years) and the rate is 6.8% in Niagara Falls. While Niagara County's poverty rate is 11.7%, poverty is significant in Niagara Falls with a 23.5% poverty rate, Lockport at 14.2% and North Tonawanda at 10.2%. The poverty rate for children under 18 years of age in Niagara County is 16.6% and 35.7% in the city of Niagara Falls.

The median household income (2016-2020 in 2020 dollars) in Niagara County is \$57,252 as compared to \$71,117 in NYS. Income disparities are further evidenced in the cities of Niagara County with a median household income of \$41,137 in Niagara Falls and \$46,706 in Lockport and \$60,673 in North Tonawanda.<sup>23</sup> The Tuscarora Reservation with a population of 1,167 has a poverty rate of 39.9% and a median income of \$14,323, significantly lower than that of Niagara County and its cities of Niagara Falls, Lockport, and North Tonawanda.<sup>24</sup>

Unemployment in the region was at an all-time high in 2020 due to the economic effects of the COVID-19 pandemic. The New York State Department of Labor reports the April 2020 unemployment rate for Niagara County was 24.4% and decreased to 6.1% by April 2021 and 3.8% in April 2022.<sup>25</sup> There are other economic variances throughout the county. The median value of owner-occupied housing units (2016-2020) is \$131,600 in Niagara County with a low of \$78,500 in Niagara Falls, \$95,600 in Lockport, \$129,200 in North Tonawanda as compared to \$325,000 in NYS. The owner-occupied housing unit rate in Niagara County is 71.7% while the rate in Niagara Falls is 58.6%, 55.5% in Lockport, and 69.9% in North Tonawanda, while the NYS rate is 54.1%.<sup>26</sup>

Educational attainment in the high poverty communities such as Niagara Falls and Lockport is also a challenge. In Niagara County 91.5% of persons age 25+ are high school graduates or higher while the rate is 88.4% in Niagara Falls and 89.7% in Lockport and 93.1% in North Tonawanda. In Niagara County, 25.6% of persons age 25+ have a bachelor's degree or higher as compared to the NYS rate of 37.5%. This rate is even lower in Niagara Falls with 19.8% of persons age 25+ with bachelor's degree or higher and Lockport with 23.6%.<sup>27</sup> Furthermore, the Niagara Falls School District's 2021 four-year high school graduation rate is 74%. The North Tonawanda City graduation rate is 79% and the Lockport City School District rate is 87%. Poverty and racial disparities are evident throughout Niagara Falls schools with 83% of students economically disadvantaged and 63% of students represent minority populations. Economically disadvantaged students are those who participate in, or whose family participates in, economic assistance programs, such as the free or reduced-price lunch programs, Social Security Insurance (SSI), Food Stamps, Foster Care, Refugee Assistance (cash or medical assistance), Earned Income Tax Credit (EITC), Home Energy Assistance Program (HEAP), Safety Net Assistance (SNA), Bureau of Indian Affairs (BIA), or Family Assistance: Temporary Assistance for Needy Families (TANF). If one student in a family is identified as low income, all students from that household (economic unit) may be identified as low income).<sup>28</sup>

In light of the success of the Affordable Care Act and New York State of Health to increase the number of individuals with health insurance, the rate of persons without health insurance is still high in some cities and rural areas. Lockport has a rate of 5.9% for the rate for uninsured persons under 65 years is 5.9% for Lockport, 4.3% for Niagara Falls, 2.8% for North Tonawanda, and 4.3% for Niagara County while the NYS rate is 6.1%.<sup>29</sup> The percentage of individuals with public health insurance coverage in 2020 is 55.1% for Niagara Falls, 42.2% for Niagara County and 39.4% in New York State.<sup>30</sup>

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<sup>23</sup> US Census, Quick Facts, April 1, 2020

<sup>24</sup> US Census, American Community Survey 2020 5-year Estimates

<sup>25</sup> NYS Department of Labor, Labor Force and Unemployment Data

<sup>26</sup> US Census, Quick Facts April 1, 2020

<sup>27</sup> US Census, Quick Facts April 1, 2020

<sup>28</sup> <https://data.nysed.gov/> 2020-2021

<sup>29</sup> US Census, 2017 American Community Survey

<sup>30</sup> 2020 US Census, American Community Survey 5-Year Estimates Data Profile

Access to a regular source of care is a concern among the uninsured and underinsured as well as the general population given provider shortages throughout the region. In Erie County, the primary care provider rate is 1,250:1 and the Niagara County rate is 2,430:1 as compared the New York State (NYS) rate of 1,180:1. The mental health provider rate for Erie County is 280:1 while the rate for Niagara County is 720:1 and the rate for NYS is 310:1.<sup>31</sup>

In Niagara County, 85.6% of adults 18 years and over (age-adjusted), have a usual source of health care while 14.4% do not have a usual source of health care.<sup>32</sup> The percentage of adults who did not receive health care because of cost is 9.0% in Niagara County and 11.3% for New York State.<sup>33</sup> The percentage of children who have had the recommended number of well child visits in government sponsored insurance programs in Niagara County is 79.9% while the NYS rate is 75.2%.<sup>34</sup>

Mobility issues may further contribute to inaccessibility to healthcare services. The rate of individuals with a disability (under age 65 years) in the city of Niagara Falls, a city of significant poverty, is 13.0%, with the rate in Lockport at 12.3%, North Tonawanda at 11.5% while the rate throughout Niagara County is 10.2% and the NYS rate at 7.6%. The rate of persons with an ambulatory difficulty in Niagara County is 7.9% and the NYS rate is 6.6%. Persons with an ambulatory difficulty may be limited in physical activity leading to a further decline in health and may have unique requirements for accessibility, such as ramps or elevators. Individuals in urban areas may have access to public transportation options, but mobility issues may still be a challenge. Lack of a privately owned vehicle challenges all populations in accessing healthcare services. The rate of occupied housing units with no vehicles is 9.86% in Niagara County.<sup>35</sup>

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<sup>31</sup> 2022 County Health Rankings & Roadmaps Program

<sup>32</sup> CHIRS – NYS Expanded Behavioral Risk Factor Surveillance System data as of August 2020

<sup>33</sup> NYS CHIRS – Expanded Behavioral Risk Factor Surveillance System data as of December 2020

<sup>34</sup> NYS CHIRS - Medicaid & Child Health Plus data as of November 2021.

<sup>35</sup> US Census, 2020 American Community Survey 5 Year Estimates

## Health Status of the Community

This assessment of the health of Erie County and Niagara County was conducted by Kaleida Health using data from multiple sources including the County Health Rankings, New York State Department of Health (NYSDOH), NYS Prevention Agenda Dashboard, NYS Vital Records, NYS Statewide Planning and Research Cooperative system (SPARCS), NYS Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS), Centers for Disease Control and Prevention (CDC), among others. Kaleida Health further engaged the Erie County Department of Health, the Niagara County Department of Health, and other partners in the development of the complete assessment including surveys and focus group sessions with input from the underserved as described in the Community Engagement section of this report.

### **Social Determinants of Health**

This overarching strategy of this Community Health Needs Assessment is the strategy of the 2019-2024 New York State Prevention Agenda to implement public health approaches that improve the health and well-being of entire populations and achieve health equity. This strategy includes an emphasis on social determinants of health (SDOH) – defined by Healthy People 2020 as the conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality of life outcomes and risk. Such determinants include social and economic opportunities, education, safety in neighborhoods and communities, the quality of physical environments (e.g., the cleanliness of our water, food, air, and housing), and social interactions and relationships. Health behaviors and access to health care are also important.<sup>36</sup> The health outcomes, risk factors and prevalence outlined in this assessment are impacted by many of the SDOH described in the Community Served section of this report. Data are provided below for some of the SDOH addressed in this assessment including poverty, race and ethnicity, access to care and behavioral risk factors.

### **COVID-19**

While a significant portion of this Community Health Needs Assessment is devoted to disease states, poor health outcomes, risk factors and SDOH, a comprehensive health assessment must also include the impact of the COVID-19 pandemic. Throughout 2020 and 2021, the pandemic had overwhelmed healthcare systems and reduced the capacity to deliver essential health services in Erie and Niagara counties, NYS, the US and globally. COVID-19 had a broad impact across all areas of care. Due to restrictions, elective surgeries were cancelled, outpatient care was cut back; and routine care and preventative screening were also neglected. Many hospitals and clinics implemented Telehealth care to assure access to care. However, the overall effects of the COVID-19 pandemic significantly impacted the health and mental health of communities. As critical services were delayed or deemed non-essential, patients did not receive the right care at the right time. Hospitals and clinics are now working with their patients to update their screenings and provide needed health and wellness checks. While COVID-19 positive cases have continued through 2022, the impact on healthcare has been less severe due to the use of vaccines and milder strains of the virus not resulting in hospitalization and/or death.

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<sup>36</sup> NYS Department of Health, [https://www.health.ny.gov/prevention/prevention\\_agenda/2019-2024/docs/ship/overview.pdf](https://www.health.ny.gov/prevention/prevention_agenda/2019-2024/docs/ship/overview.pdf)

Below table represents NYS Statewide COVID-19 Testing data indicates the number of positive tests for COVID-19 for NYS and by county during the period 3/1/2020 through 11/6/2022 <sup>37</sup>:

<b>NYS Statewide COVID-19 Positive Tests – Cumulative Data from 3/1/2020 through 11/6/2022 (NYS Department of Health, NYS Statewide COVID-19 Testing Data; US Census, Quick Facts April 1, 2020)</b>		
Geographic Location	Total Population	COVID-19 Positive Tests - 3/1/20 – 11/6/22
Erie County	954,236	257,827
Niagara County	212,666	57,280
New York State	20,200,249	6,192,173

The following table represents NYS COVID-19 Vaccine progress as of 11/4/2022 for NYS and by county:  
<sup>38</sup>

<b>NYS COVID-19 Vaccine Tracker – Vaccine Program to Date 11-4-2022</b>			
Geographic Location	% with at least 1 vaccine dose	% who completed vaccine series	% of eligible population with boosters
Erie County	78.0%	72.4%	60.4%
Niagara County	71.8%	67.4%	57.6%
New York State	83.6%	75.6%	53.4%

### **County Health Rankings and Leading Causes of Death**

The County Health Rankings & Roadmaps program, a collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, provide annual actionable data to identify health issues of concern to a community and to plan strategies for health intervention throughout the counties of the United States. The 2022 County Health Rankings has ranked Erie County and Niagara County as follows:

- Health Outcomes - Erie County is ranked 46 out of 62 counties in New York State (NYS) for Overall Health Outcomes and Niagara County is ranked 53 out of 62 . Health outcomes are based on equal weighting of length and quality of life. Erie County is ranked 44 out of 62 counties for Length of Life and 54 out of 62 for Quality of Life. Niagara County is ranked 52 out of 62 counties for Length of Life and 51 out of 62 for Quality of Life
- Health Factors - Erie County is ranked 29 out of 62 counties for Overall Health Factors and Niagara County is ranked 50 out of 62 counties for Overall Health Factors. Health Factors are based on weighted scores for health behaviors, clinical care, social and economic factors, and the physical environment.

Leading causes of all deaths (age adjusted rates) in Erie County and Niagara County in 2019 are as follows:

- Heart disease is the number one cause of death in the counties and accounts for 164.9 per 100,000 population of all deaths in Erie County and 211.3 per 100,000 in Niagara County. Cancer is the next leading cause of death in the counties at 159.1 per 100,000 population in Erie County and 167.6 per 100,000 in Niagara County. It is important to note that cancer is the number one

<sup>37</sup> NYS Department of Health, <https://coronavirus.health.ny.gov/covid-19-testing-tracker>

<sup>38</sup> NYS Department of Health, <https://coronavirus.health.ny.gov/vaccination-progress-date>

cause of premature (<75 years) death in both counties with the Erie County rate at 90.7 per 100,000 and Niagara County at 99.7 per 100,000.

- The next three leading causes of all deaths in Erie County is chronic lower respiratory disease at 38.9 per 100,000, stroke at 35.4 per 100,000, and unintentional injury at 38.8 per 100,000. The next three leading causes of death in Niagara County is chronic lower respiratory disease at 46.3 per 100,000 population, unintentional injury at 45.3 per 100,000 and stroke at 38.6 per 100,000.

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## **Chronic Disease**

### **Cardiovascular Disease**

The Centers for Disease Control (CDC) at <https://www.cdc.gov/heartdisease/facts.htm> lists the following statistics on the prevalence of cardiovascular disease (heart disease), coronary artery disease and heart attack in the United States:

- Heart disease is the leading cause of death for men, women, and people of most racial and ethnic groups in the United States.
- One person dies every 36 seconds in the United States from cardiovascular disease.
- About 659,000 people in the United States die from heart disease each year—that's 1 in every 4 deaths.
- Heart disease costs the United States about \$363 billion each year from 2016 to 2017. This includes the cost of health care services, medicines, and lost productivity due to death. Coronary heart disease (CAD) is the most common type of heart disease, killing 360,900 people in 2019.
- About 18.2 million adults age 20 and older have CAD (about 6.7%). About 2 in 10 deaths from CAD happen in adults less than 65 years old.
- In the United States, someone has a heart attack every 40 seconds.
- Every year, about 805,000 people in the United States have a heart attack.
  - Of these, 605,000 are a first heart attack,
  - 200,000 happen to people who have already had a heart attack,
  - About 1 in 5 heart attacks is silent—the damage is done, but the person is not aware of it.

A number of health descriptors indicate that both Erie County and Niagara County have a higher percentage of its population suffering from cardiovascular disease than all of New York State (NYS), and Niagara County rates fare worse than Erie County rates.

- The cardiovascular disease premature death rates (ages 35-64) per 100,000 is 131.4 in Erie County and much higher at 152.7 in Niagara County while the NYS rate is 104.2<sup>40</sup>
- The cardiovascular disease hospitalization rates per 10,000 is 169.6 for Erie County and significantly higher in Niagara County with a rate of 195.8 while the NYS rate is 155.2.<sup>41</sup>
- The heart attack hospitalization rates per 10,000 is 20.4% in Erie County and even higher in Niagara County with a rate of 28.0% while the NYS rate is 16.7%.<sup>42</sup>

Racial and ethnic disparities exacerbate the cardiovascular disease rates in Erie and Niagara counties.

- The mortality rate for diseases of the heart per 100,000 population (age-adjusted) for Erie County is 199.5 for Black/African Americans, 168.4 for Whites, and 132.3 for Hispanics.

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<sup>39</sup> 2019, NYS Vital Statistics data as of January 2022

<sup>40</sup> CHIRS - 2017-2019, NYS Vital Statistics data as of January 2022

<sup>41</sup> 2017-2019, NYS SPARCS data as of November 2021

<sup>42</sup> 2017-2019, NYS SPARCS data as of November 2021



- The mortality rate for diseases of the heart per 100,000 population (age-adjusted) for Niagara County is 306.1 for Black/African Americans, 201.2 for Whites, and 184.1 for Hispanics.<sup>43</sup>
- The mortality rate for diseases of the heart per 100,000 population (age-adjusted) for all of New York State is 206.5 for Black/African Americans, 169.7 for Whites, and 132.6 for Hispanics.<sup>44</sup>

Disparities further exist among women. According to the American Heart Association (AHA):

- Cardiovascular disease is the No. 1 killer of women, causing 1 in 3 deaths each year.
- Cardiovascular disease kills more women than all forms of cancer combined and yet only 44% of women recognize that cardiovascular disease is their greatest health threat.
- Among females 20 years and older, nearly 45% are living with some form of cardiovascular disease and less than 50% of women entering pregnancy in the United States have good heart health.<sup>45</sup>

AHA statistics further exemplify the racial disparities that exist for cardiovascular disease among women of color:

- Cardiovascular diseases kill nearly 50,000 African American women annually.
- Of African American women ages 20 and older, 49 percent have heart diseases.
- Only 1 in 5 African American women believes she is personally at risk.
- Only 58% of African American women are aware of the signs and symptoms of a heart attack.
- Only 36% of African American women know that heart disease is their greatest health risk.<sup>46</sup>

AHA states that “cardiovascular disease impacts some women at higher rates than others, but the simple truth is that most cardiovascular diseases can still be prevented with education and healthy lifestyle changes.”

### High Blood Pressure

High blood pressure (also referred to as HBP or hypertension) is when an individual’s blood pressure, the force of blood flowing through your blood vessels, is consistently too high. Nearly half of American adults have high blood pressure. Many don’t even know they have it. (American Heart Association, [www.heart.org](http://www.heart.org)) According to the CDC, high blood pressure increases the risk of dangerous health conditions including heart attack, stroke, and kidney disease.

Key findings from the NYS Department of Health BRFSS Brief No. 2022-13, High Blood Pressure, NYS Adults 2020 are as follows:

- Almost 4.5 million adults in New York State (NYS) report being told by a health professional they have HBP (29.3%). Among that group, over three-quarters (78.6%) are taking medication to control their HBP.
- Being diagnosed with HBP and taking medication to control HBP are highest among adults over 65 years of age (57.5% and 92.9%, respectively), and among those with Medicare coverage (54.6% and 89.5%, respectively).
- Diagnosed HBP is also significantly more common among non-Hispanic Black adults (38.2%) compared to non-Hispanic white (31.1%), non-Hispanic other (21.9%) and Hispanic adults (22.9%).

<sup>43</sup> 2017-2019, Erie County and Niagara County Health Indicators by Race/Ethnicity, NYS Department of Health

<sup>44</sup> 2017-2019, NYS SPARCS data as of November 2021

<sup>45</sup> American Heart Association (AHA) the Facts About Women and Heart Disease - <https://www.goredforwomen.org/en/about-heart-disease-in-women/facts>

<sup>46</sup> Heart Disease in African American Women - <https://www.goredforwomen.org/en/about-heart-disease-in-women/facts/heart-disease-in-african-american-women>

- Seven in ten adults with diabetes report having HBP (70.8%), while the proportion of HBP among adults who have obesity is about 2.3 times higher than the proportion among adults who have neither overweight nor obesity (43.4% compared to 18.7%).

The impact of high blood pressure among Erie County and Niagara County residents is exemplified by below statistics:

- The age-adjusted percentage of adults with physician-diagnosed high blood pressure (2016) is 26.7% in Erie County, and the rate is 29.5% in Niagara County while the NYS rate is 28.39%.<sup>47</sup>
- The 2017-2019 hypertension hospitalization rate without heart failure per 10,000 (any diagnosis) - Aged 18 years and older is 487.2 for Erie County, 583.6 for Niagara County, and 478.9 for all of NYS. 2017-2019, SPARCS, data as of November 2021.

The age-adjusted hypertension emergency department visit rate per 10,000, age 18 years and older is 28.5 in Erie County and 25.5 in Niagara County and the NYS rate of 31.5.<sup>48</sup>

### Stroke

According to the CDC, a stroke causes brain tissue to die, which can lead to brain damage, disability and death. Stroke is the fifth leading cause of death in the United States and the leading cause of serious long-term disability. This is disturbing because about 80% of strokes are preventable. Individuals can greatly reduce their risk for stroke by making lifestyle changes to help control your blood pressure and cholesterol levels and, in some cases, by taking medication. The CDC states that about 140,000 Americans each year – that is one out of every 20 deaths and costs the United States an estimated \$34 billion each year in healthcare services, medicine to treat stroke and missed days of work.

Stroke rates in Erie County and Niagara County are significantly higher than for New York State (NYS) as evidenced by below 2017-2019 data.

- The age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000 is 34.5 for Erie County and 34.1 for Niagara County while the NYS rate is 24.1.<sup>49</sup>
- The age-adjusted cerebrovascular disease (stroke) hospitalization rate per 10,000 is 26.5 in Erie County and 24.7 in Niagara County while the NYS rates is much lower at 21.3.<sup>50</sup>

Disparities exist for stroke among the minority populations of Erie County and Niagara County as evidenced by below 2017-2019 data.

- The Erie County age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000 population, is 32.8 for Whites while it is 43.7 for /Black African Americans and 38.8 for Hispanics. The Niagara County age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000 population, is 33.5 for Whites while it is 52.6 for Black/African Americans and 31.7 for Hispanics.<sup>51</sup>

### Diabetes

Diabetes, also called diabetes mellitus, is a condition that causes blood sugar to rise. A fasting blood glucose (sugar) level of 126 milligrams per deciliter (mg/dL) or higher is dangerous. Untreated diabetes can lead to many serious medical problems, including cardiovascular disease.<sup>52</sup> Type 2 diabetes primarily affects adults and may be delayed or controlled with diet and exercise. Type 1 diabetes is more likely to develop in children, teens and young adults and account for 5% of all cases of diabetes. Diabetes is the

<sup>47</sup> 2016, NYS Expanded Behavioral Risk Factor Surveillance System, Data as of November 2018

<sup>48</sup> NYS CHIRS - 2017-2019, NYS SPARCS data as of November 2021

<sup>49</sup> NYS CHIRS - 2017-2019, NYS Vital Statistics as of January 2022

<sup>50</sup> NYS CHIRS, 2017-2019, SPARCS as of November 2021

<sup>51</sup> 2017-2019, Erie County and Niagara County Health Indicators by Race/Ethnicity, NYS Department of Health

<sup>52</sup> American Heart Association, [www.heart.org](http://www.heart.org)

seventh leading cause of death in the United States and can cause serious health problems called complications, including heart disease, blindness, kidney failure, and lower-extremity amputations.<sup>53</sup>

Diabetes is highly prevalent in Erie County and more so in Niagara County.

- The percentage of adults with physician-diagnosed diabetes (2018) is 10.0% in Erie County and 12.1% in Niagara County and the NYS rate is 10.0%.<sup>54</sup>
- Rate of hospitalizations for potentially preventable, short-term complications of diabetes per 10,000, aged 18+ is 7.6 in both Erie County and Niagara County while the NYS rate is 6.2. footnote same as 48
- Among children aged 6-17, the rate of hospitalizations for short-term complications of diabetes per 10,000 is 4.4 in Erie County and 4.6 in Niagara County while the NYS rate is 2.3.<sup>55</sup>

The rate of diabetes mortality among Black/African-Americans is more than double the rate of the White population of Erie and Niagara counties.

- The age-adjusted diabetes mortality rate per 100,000 population in Erie County is 50.7 for Black/African Americans, 29.1 for Hispanics, and 18.9 for Whites.

The age-adjusted diabetes mortality rate per 100,000 population in Niagara County is 56.9 for Black/African Americans, 25.1 for Hispanics, and 20.1 for Whites.<sup>56</sup>

### Chronic Kidney Disease

According to the CDC, Chronic Kidney Disease (CKD) is a condition in which the kidneys are damaged and cannot filter blood as well as they should. Because of this, excess fluid and waste from blood remain in the body and may cause other health problems, such as heart disease and stroke. The CDC reports that kidney diseases are the ninth leading cause of death in the United States.

Erie County and Niagara County CKD (2017-2019) rates are as follows:

- The age-adjusted CKD emergency department visit rate per 10,000 (any diagnosis) is 149.6 in Erie County, 123.7 in Niagara County, and the NYS rate is 139.8.<sup>57</sup>
- The age-adjusted CKD hospitalization rate per 10,000 (any diagnosis) is 126.7 for Erie County, 110.0 for Niagara County and 122.6 for NYS.<sup>58</sup>

### Obesity

The Centers for Disease Control (CDC) describes obesity as a common, serious, and costly chronic disease. Many factors can contribute to gaining too much weight including eating patterns, physical activity levels, sleep routines, genetics, and certain medications. The CDC further adds that the conditions in which we live, work, and play—called social determinants of health—also matter. Child care and school environments, community design, access to healthy, affordable foods and beverages, and access to safe and convenient places for physical activity affect our ability to make healthy choices.<sup>59</sup>

In its Behavioral Risk Factor Surveillance System (BRFSS) Brief No. 2022-07, the NYS Department of Health describes “obesity as a significant public health epidemic, a complex disease with multifactorial etiology, and a leading cause of preventable death in the United States, second only to smoking. Obesity increases the risk of many diseases for adults, including type 2 diabetes; high blood pressure; heart, liver, kidney,

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<sup>53</sup> Centers for Disease Control and Prevention (CDC)

<sup>54</sup> CHIRS - 2018, NYS Expanded Behavioral Risk Factor Surveillance System, data as of December 2020

<sup>55</sup> CHIRS - 2017-2019, NYS SPARCS data as of November 2021

<sup>56</sup> 2017-2019, Erie County and Niagara County Health Indicators by Race/Ethnicity, NYS Department of Health

<sup>57</sup> CHIRS - 2017-2019, NYS SPARCS data as of November 2021

<sup>58</sup> CHIRS - 2017-2019, NYS SPARCS data as of November 2021

<sup>59</sup> CDC, <https://www.cdc.gov/obesity/basics/index.html>

and gallbladder diseases; stroke; arthritis; depression; sleep apnea; pregnancy complications; and many types of cancer. Obesity is also associated with an increased risk of overall mortality. Increasingly, these conditions are being seen in children and adolescents with obesity who are also at greater risk for certain diseases, such as type 2 diabetes, high blood pressure, and depression. Obesity is also associated with impaired immune function, decreased lung capacity, increased risk of severe illness from COVID-19 potentially tripling the risk of hospitalization due to a COVID-19 infection, and as body mass index (BMI) increases, the risk of death from COVID-19 increases. Obesity also disproportionately impacts specific racial and ethnic minority groups, including Hispanic and Black non-Hispanic adults who have higher prevalence of obesity<sup>60</sup> and are more likely to experience worse outcomes from COVID-19.”<sup>60</sup>

Key findings identified in the BRFSS Brief on Overweight and Obesity, NYS Adults 2020 exemplify the problem:

- More than one-quarter (26.3%) of adults in New York State (NYS) have obesity and another 37% are overweight; these two conditions affect over 8.2 million people in NYS.
- The prevalence of obesity in NYS is higher among adults who are Black non-Hispanic (35.1%) and Hispanic (30.4%), currently living with disability (34.7%), and living in the region outside of New York City (28.3%).
- Obesity is less prevalent among adults aged 18-24 years (16.7%) and among adults with a college degree (19.9%).<sup>61</sup>

Overweight and obesity rates in New York State have increased in recent years:

- The percentage of New York State adults who are overweight or obese increased from 42% in 1997 to 63.2% in 2019.
- The percentage of New York State adults who have obesity increased from 16% in 1997 to 27.1% in 2019.
- Obesity among children and adolescents has tripled over the past three decades. Currently, a third of New York's children are obese or overweight.<sup>62</sup>

Overweight and obesity rates in Erie County and Niagara County are similar to those in NYS as follows:

- The 2018 age-adjusted percentage of adults, 18 years and over, who are obese (BMI  $\geq$  30) or overweight (BMI 25-29.9) is 64.3 in Erie County, 67.5 in Niagara County, and 62.5 in NYS.<sup>63</sup>
- The 2018 age-adjusted percentage of adults, 18 years and over, who are obese (BMI  $\geq$  30) is 31.0% in Erie County, 33.5% in Niagara County, and 27.9% in NYS.<sup>64</sup>

Individuals of lower income also have a higher incidence of being obese:

- The percentage of adults with an annual household incomes less than \$25,000 with obesity is 39.0% in Erie County, 33.2% in Niagara County, and 31.8% in NYS.<sup>65</sup>

Increasingly, many of the diseases, previously associated only with adulthood, are also being seen in overweight and obese children. Along with the risks for life-shortening chronic diseases, being overweight in a society that stigmatizes this condition contributes to poor mental health associated with serious shame, self-blame, low self-esteem and depression. **See pages 32-33 for obesity among children data.**

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<sup>60</sup> NYS Department of Health, BRFSS Brief No. 2022-08, Overweight and Obesity, NYS Adults, 2020

<sup>61</sup> NYS Department of Health, BRFSS Brief No. 2022-08, Overweight and Obesity, NYS Adults, 2020

<sup>62</sup> NYS Department of Health <https://www.health.ny.gov/prevention/obesity/>

<sup>63</sup> CHIRS - 2018, NYS Expanded Behavioral Risk Factor Surveillance System as of December 2020

<sup>64</sup> CHIRS - 2018, NYS Expanded Behavioral Risk Factor Surveillance System data as of December 2020

<sup>65</sup> 2018 NYS BRFSS, data as of August 2020 (NYS Prevention Agenda Dashboard)

Good nutrition is key to lowering obesity rates. However, access to healthy foods is a challenge for many low-income individuals living in urban, underserved neighborhoods and for those in rural areas with limited transportation options. The U.S. Department of Agriculture (USDA) defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways. The following data exemplify food insecurity and poor nutrition in Erie and Niagara counties:

- The percentage of the population that experienced food insecurity at some point during the year (2018) is 11.4% in Erie County, 11.8% in Niagara County and 10.7% in NYS<sup>66</sup>  
The percentage of population with low income and low access to supermarket or large grocery stores (2015) was 5.6% in Erie County, 4.2% in Niagara County.<sup>67</sup>  
The 2018 age-adjusted percentage of adults who report consuming less than one fruit or vegetable daily (no fruits and vegetables) is 27.8% in Erie County, 26.6% in Niagara County and 28.1% for NYS.<sup>68</sup>
- Percentage of adults with an annual household income less than \$25,000 who consume one or more sugary drinks per day is 34.1% in Erie County, 41.2% in Niagara County, and 28.5% in NYS.<sup>69</sup>  
A lack of physical activity is another contributing factor to obesity.
- The age-adjusted percentage of adults who participated in leisure time physical activity in the past 30 days is 79.8% in Erie County and 75.7% in Niagara County and 76.4% for NYS. The concern is the estimated 20% to 25% who did not.<sup>70</sup>

#### Smoking and E-Cigarettes

- According to the CDC, cigarette smoking remains the leading cause of preventable disease, disability, and death in the United States. In 2020, 12.5% of U.S. adults (an estimated 30.8 million people) currently smoked cigarettes: 14.1% of men, 11% of women. The American Heart Association reports that almost one third of deaths from coronary heart disease are due to smoking and secondhand smoke, and smoking is linked to about 90% of lung cancer cases in the United States. Smoking rates overall are down, but too many adults still smoke, vape and use other forms of tobacco, especially between the ages of 21 and 34.<sup>71</sup> The prevalence of cigarette smoking among adults in Erie County is 16.3% and even higher in Niagara County at 21.6%, while both county rates are higher than the NYS rate of 12.8%.
- The percentage of cigarette smoking among adults with an annual income less than \$25,000 is 28.5% in Erie County, 34.8% in Niagara County and just 15.3% in New York State.<sup>72</sup>

E-cigarettes have been the most commonly used tobacco product among youth since 2014. Most e-cigarettes (vapes) contain nicotine—the addictive drug in regular cigarettes, cigars, and other tobacco products. Nicotine can harm parts of the developing adolescent brain that control attention, learning, mood, and impulse control as the brain keeps developing until about age 25. Each time a new memory is created or a new skill is learned, stronger connections – or synapses – are built between brain cells. Young people’s brains build synapses faster than adult brains. Nicotine changes the way these synapses are

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<sup>66</sup> 2018, Map the Meal Gap, data as of December 2021

<sup>67</sup> 2015 USDA, Food Environment Atlas, data as of March 2018

<sup>68</sup> 2018 NYS Expanded Behavioral Risk Factor Surveillance System, data as of December 2020, CHIRS-NYS Department of Health

<sup>69</sup> 2018 NYS BRFSS, data as of August 2020

<sup>70</sup> 2018 NYS Expanded Behavioral Risk Factor Surveillance System, data as of December 2020, CHIRS-NYS Department of Health

<sup>71</sup> <https://www.heart.org/en/healthy-living/healthy-lifestyle/quit-smoking-tobacco/how-smoking-and-nicotine-damage-your-body>

<sup>72</sup> 2018 NYS BRFSS data as of August 2020

formed. Using nicotine in adolescence may also increase risk for future addiction to other drugs.<sup>73</sup>

- In NYS, an estimated 589,000 adults, or 4.1% of the state's adult population aged 18 years and older, currently use e-cigarettes every day or some days, and among current smokers, 14.0% currently use e-cigarettes every day or some days.<sup>74</sup>
- In 2021, about 1 out of every 35 middle school students (2.8%) reported that they had used electronic cigarettes in the past 30 days.
- In 2021, about 1 of every 9 high school students (11.3%) reported that they had used electronic cigarettes in the past 30 days.<sup>75</sup>

## Cancer

Cancer is a major public health problem and the 2<sup>nd</sup> leading cause of death in the United States (American Cancer Society) New York State, Erie and Niagara counties; exceeded only by heart disease.<sup>76</sup>

The Centers for Disease Control (CDC) states: "In the United States in 2019, 1,752,735 new cancer cases were reported and 599,589 people died of cancer. For every 100,000 people, 439 new cancer cases were reported and 146 people died of cancer. 2019 is the latest year for which incidence data are available."<sup>77</sup>

Data from the American Cancer Society (ACS) predicts that approximately 609,360 deaths from cancer are expected in the US in 2022, which is about 1,670 deaths per day. 32,230 deaths from cancer are expected in NYS in 2022.

ACS states that the overall age-adjusted cancer death rate rose during most of the 20th century, peaking in 1991 at 215 cancer deaths per 100,000 people, mainly because of the smoking epidemic. As of 2019, the rate had dropped to 146 per 100,000 – a decline of 32% – mostly because of reductions in smoking and advances in early detection and treatment for some cancers. The decline in the death rate translates into nearly 3.5 million fewer cancer deaths from 1991 to 2019, largely driven by progress against the four most common cancer types – lung, colorectal, breast, and prostate

ACS further estimates that a little over 1.9 million new cancer cases are expected to be diagnosed in the US in 2022. This estimate excludes basal cell and squamous cell skin cancers, which are not required to be reported to cancer registries, and carcinoma in situ (noninvasive cancer) except for urinary bladder. ACS estimates that 118,830 new cancer cases are expected in NYS in 2022.<sup>78</sup>

- In Erie and Niagara counties and NYS, cancer is the 2<sup>nd</sup> leading cause of death and the leading cause of premature death, less than 75 years.<sup>79</sup>
- The 2018 age-adjusted all cancer mortality rate in Erie County per 100,000 is 225.2 while the rate in Niagara County is lower at 171.1 and the NYS rate is 175.5. The 2018 age-adjusted all cancer incidence rate per 100,000 population in Erie County is 539.4 and in Niagara County the rate is 551.6. Both counties have a higher rate than the NYS rate of 480.7.<sup>80</sup>

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<sup>73</sup> [https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html#other-risks](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html#other-risks)

<sup>74</sup> NYS Department of Health

<sup>75</sup> [https://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/youth\\_data/tobacco\\_use/index.htm](https://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm)

<sup>76</sup> NYS Vital Statistics data as of May 2018

<sup>77</sup> <https://www.cdc.gov/cancer/dcpc/data/index.htm>

<sup>78</sup> <https://www.cancer.org/research/cancer-facts-statistics.html> - ACS, Cancer Facts and Statistics 2022

<sup>79</sup> 2019 NYS Department of Health, Vital Statistics Data as of January 2022

<sup>80</sup> , 2018, Cancer Registry Data, as of November 2020 - CHIRS

Disparities exist in the incidence of certain cancers.

- In Erie County, the age-adjusted lung cancer incidence rate per 100,000 population (2016-2018) among whites is 71.3 while the rate among African Americans is much higher at 81.0.
- In Niagara County, the age-adjusted lung cancer incidence rate per 100,000 population (2016-2018) among whites is 74.5 and the rate among African Americans is 63.4.
- In Erie County, the age-adjusted colorectal cancer incidence rate per 100,000 population (2016-2018) is 36.1 for whites and much higher for African Americans at 48.0.
- In Niagara County, the age-adjusted colorectal cancer incidence rate per 100,000 population (2016-2018) is 42.3 for whites and similarly at 42.1 for African Americans.
- In Erie County, the age-adjusted female late stage breast cancer incidence rate per 100,000 population (2016-2018) is 41.3 for Whites and much higher for African Americans at 62.9.
- In Niagara County, the age-adjusted female late stage breast cancer incidence rate per 100,000 population (2016-2018), is 42.4 for whites and 45.4 for African Americans.<sup>81</sup>

## **Child Health**

### Child Mortality Rates

- The child mortality rate for Erie County per 100,000 population among children age 1 to 4 years is 17.2, the Niagara County rate is 14.8 and the NYS rate is 17.7.
- The child mortality rate per 100,000 for children 5 to 14 years in Erie County is 13.0, the Niagara County rate is 10.0 and the NYS rate is 11.3. The child mortality rate per 100,000 for children 15 to 19 years in Erie County is 33.9, the Niagara County rate is 34.1 and the NYS rate is 30.1<sup>82</sup>

While the causes of childhood mortality vary, children are especially vulnerable to poor health due to illness and unintentional injury. In addition, inaccessibility to care, low rates of child wellness visits and immunizations, lack of insurance, lack of developmental screens, lack of care coordination, and the lack of family and social supports are all contributing factors. Some of the risk factors affecting child health are explored below.

### Immunizations

The CDC reports that immunization is one of the most successful and safest public health strategies for preventing communicable diseases. On-time vaccination throughout childhood is essential because it helps provide immunity before children are exposed to potentially life-threatening diseases. Vaccines are tested to ensure that they are safe and effective for children to receive at the recommended ages. High immunization rates have reduced vaccine-preventable disease to extremely low levels in the United States.

- According to the CDC, 71.7% of U.S. children, 19 to 35 months, received the recommended seven vaccine series in 2019. <https://www.cdc.gov/nchs/fastats/immunize.htm>

In New York State (NYS), high immunization levels are achieved by the time children reach school age and are supported by school entry laws. However, the immunization rates of very young children, 19-35 months of age, are still below the Healthy People 2020 goal of 80 percent.

- The percentage of children with 4:3:1:3:3:1:4 immunization series, aged 19-35 months, is much the same in Erie and Niagara counties and comparable to the above US rate from the CDC. The

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<sup>81</sup> 2017-2019 Erie County and Niagara County Health Indicators by Race/Ethnicity, NYS Department of Health

<sup>82</sup> 2017-2019, NYS Vital Statistics, data as of January 2022; NYS CHIRS

Erie County rate is 77.7% and it is 75.3% in Niagara County while the NYS rate is lower than both counties at 66.1%. The NYS Prevention Agenda 2024 goal is 70.5%.<sup>83</sup>

- In NYS, the difference in the 4:3:1:3:3:1:4 immunization series coverage between 19-35-month old children living in households below the federal poverty level compared with those living in households at or above the federal poverty is 20.8%.<sup>84</sup>

## Asthma

The CDC reports that Asthma is a serious disease causing wheezing, difficulty breathing, and coughing; and over a lifetime, it can cause permanent lung damage. About 6 million children (1 in 12) in the US ages 0-17 years have asthma. About 16% of black children and 7% of white children have asthma. While the causes of asthma are not known, how to prevent asthma attacks or at least make them less severe is known. Today, children with asthma and their caregivers report fewer attacks, missed school days, and hospital visits. More children with asthma are learning to control their asthma using an asthma action plan. Still, more than half of children with asthma had one or more attacks in 2016. Every year, 1 in 6 children with asthma visits the Emergency Department with about 1 in 20 children with asthma hospitalized for asthma in the US.

- The asthma emergency department visit rate per 10,000 among children 0-17 years is 88.2 for Erie County, 63.3 for Niagara County, and 137.1 for NYS.<sup>85</sup>
- The Asthma hospitalization rate per 10,000 among children 0-17 is 17.5 for Erie County, 11.7 for Niagara County, and 20.3 for NYS.<sup>86</sup>

Child asthma rates among minority populations are significantly higher than among the white population in Erie and Niagara counties.

- In Erie County, the asthma hospitalization rate per 10,000 population, aged 0-17 years, is 39.0 for African Americans, 32.8 for Hispanics, and 9.0 for the white population. In Niagara County, the asthma hospitalization rate per 10,000, aged 0-17, is 13.8 for African Americans, 12.8 for Hispanics, and 10.3 for the white population.<sup>87</sup>

Asthma rates among children has been a challenge for the City of Buffalo given its urban environment, high poverty rate and minority population.

- The asthma emergency department visit rate (2016-2018) per 10,000 population for children 0-4 in Buffalo is 282.0, much higher than Erie County with a rate of 137.0 during the same time period.<sup>88</sup>

Medication management and environmental improvements are helping to improve asthma among children and adults. However, more work needs to be done.

- Percentage of Medicaid Managed Care and Child Health Plus members (5-64 years) in 2019 with persistent asthma who filled prescriptions for asthma controller medications during at least 50% of their treatment period is 63.8% for Erie County, 65.0% for Niagara County and 63.9% for NYS.<sup>89</sup>

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<sup>83</sup> 2020, NYS Department of Health, Prevention Agenda Dashboard, National Immunization Survey data as of October 2021

<sup>84</sup> 2018 NYS BRFSS data as of August 2020

<sup>85</sup> 2016, NYS SPARCS data as of December 2019

<sup>86</sup> 2017-2019, SPARCS data as of November 2021, NYS CHIRS

<sup>87</sup> 2012-2014, Erie County and Niagara County Health Indicators by Race/Ethnicity, NYS Department of Health

<sup>88</sup> 2016-2018, NYS Department of Health, City of Buffalo Health Equity Report 2021

<sup>89</sup> 2019, Medicaid Managed Care and Child Health Plus, Office of Health Insurance Programs Data Mart, NYS Department of Health Asthma Dashboard



Air Pollution is measured by the average density of fine particulate matter (PM) with the average daily PM at 2.5. The 2022 County Health Rankings and Roadmap provide the following PMs to rank air pollution in counties: - 7.6 for Erie County, 8.7 for Niagara County and 6.9 for NYS.<sup>90</sup>

### Obesity in Children

Obesity is defined as a body mass index (BMI) at or above the 95th percentile of the CDC sex-specific BMI-for-age growth charts. Childhood obesity is a serious health problem in the United States, putting children and adolescents at risk for poor health. Centers for Disease Control (CDC) national statistics indicate the following:

- The prevalence (2017-2020) of obesity for children and adolescents aged 2-19 years was 19.7% and affected about 14.7 million children and adolescents.
- Obesity prevalence (2017-2020) was 12.7% among 2 to 5-year-olds, 20.7% among 6 to 11-year-olds, and 22.2% among 12 to 19-year-olds. Childhood obesity is also more common among certain populations.
- Obesity prevalence (2017-2020) was 26.2% among Hispanic children, 24.8% among non-Hispanic Black children, 16.6% among non-Hispanic White children, and 9.0% among non-Hispanic Asian children.<sup>91</sup>

The following data exemplify poor nutrition and food insecurity among children in Erie and Niagara counties and throughout NYS:

- In Erie County for 2017-2019, the percentage of elementary students who are overweight or obese (85 percentile or higher) is 30.4%, the percentage of middle/high students is 34.5.
- In Niagara County for 2017-2019, the percentage of elementary students who are overweight or obese (85 percentile or higher) in Niagara County is 33.9%, the percentage of middle/high students is 39.8.
- In New York State for 2017-2019, the percentage of elementary students who are overweight or obese (85 percentile or higher) is 31.9%, the percentage of middle/high students is 36.1%.<sup>92</sup>

Poverty and low access to healthy foods in communities and schools are contributing factors to obesity in adults with children affected as well. The U.S. Department of Agriculture (USDA) defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways. Additionally, the USDA reports that children who are food insecure are more likely to be hospitalized and may be at higher risk for developing chronic diseases such as obesity as a result in lower quality diet, anemia and asthma. In addition, food-insecure children may also be at higher risk for behavioral and social issues including fighting, hyperactivity, anxiety and bullying.

- The percent of children that experienced food insecurity at some point during 2019 is 18.0% in Erie County, 18.5% in Niagara County and 15.6% for NYS<sup>93</sup>

### Oral Health

Oral health among children in Erie County and Niagara County is an ongoing concern and one that is impacted by income and access to a dental provider.

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<sup>90</sup> 2022 County Health Rankings and Roadmaps

<sup>91</sup> 2017-2020, CDC National Center for Health Statistics (NCHS) data brief

<sup>92</sup> NYS CHIRS, Student Weight Status Category Reporting System (SWSCRS) 2017-2019

<sup>93</sup> 2019, Feeding America, Map the Meal Gap,, <https://map.feedingamerica.org/county/2019/child/>

- The percentage of Medicaid enrollees (age 2-20 years) who had at least one preventive dental visit within the past year was just 49.2% in Erie County and 48.7% in Niagara County and 42.1% for NYS<sup>94</sup>
- The number of outpatient visits due to dental caries in children aged 3-5 years per 10,000 population for that age group for 2017-2019 is 425.3 in Erie County, 320.6 in Niagara County, and 146.4 for NYS.<sup>95</sup>
- The percentage of 3<sup>rd</sup> grade children with untreated carries (reflects the presence of a cavity) (2015-2017) was 48.6% in Erie County and 45.6% in Niagara County. Access to a dentist remains a challenge throughout the counties with the dentist provider ratio for Erie County at 1,170:1, and 1,950:1 for Niagara County and 1,190:1 for all of New York State.<sup>96</sup>

### Lead Poisoning

According to the Centers for Disease Control (CDC), “lead is a naturally occurring metal that can cause negative health effects. People are exposed to lead by eating lead chips, ingesting contaminated food or water, and or by breathing in lead dust. Children younger than 6 years are more likely to be exposed to lead dust due to their hand to mouth behavior. Many children ingest lead dust by putting objects such as toys and dirt in their mouth. Because of their developing nervous system, children younger than 6 years old are particularly vulnerable to the effects of lead exposure since lead is easily absorbed in their nervous system.”

The CDC further states that “no safe blood lead level (BLL) in children has been identified and even low levels of lead in blood can cause developmental delays, difficulty learning, behavioral issues, and neurological damage. The effects of lead poisoning can be permanent and disabling. There are steps that parents and healthcare providers can take to protect children from lead exposure. Healthcare providers can perform a blood lead test if a child was or may have been exposed to lead.”

As of October 2021, the CDC uses a blood lead reference value (BLRV) of 3.5 micrograms per deciliter (µg/dL) to identify children with BLLs higher than most children’s levels. The CDC estimates that approximately 500,000 children in the United States have BLLs at or above the BLRV.

The CDC reports that at least four million U.S. households have children living in them that are being exposed to high levels of lead. Blood lead level rates for Erie and Niagara counties are as follows:

- The incidence of confirmed high blood lead level (5 micrograms or higher per deciliter) - rate per 1,000 tested children aged <72 months in Erie County (2019) was 35.0 and 20.3 in Niagara County. Both county rates are higher than the NYS rate of 12.1 (2019)
- The incidence of confirmed high blood lead level (10 micrograms or higher per deciliter) rate per 1,000 tested children aged <72 months (2017-2019) was 14.7 in Erie County and 8.0 in Niagara County. Both county rates are higher than the NYS rate of 3.8 (2019)<sup>97</sup>

Higher blood lead levels are more common among children from some racial and ethnic minority groups, from low-income households, who were born outside of the United States, and who live in housing built before 1978. These groups are less likely to have access to quality housing and may be discriminated

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<sup>94</sup> 2015-2017, NYS Department of Health Medicaid Program Data as of June 2018

<sup>95</sup> 2017-2019 SPARCS data as of November 2021

<sup>96</sup> 2019 County Health Rankings, 2017 data

<sup>97</sup> 2016-2019 NYS Department of Health, Child Health Lead Poisoning Prevention Program Data as of September 2021

against when looking for a safe, healthy place to live. As a result, these groups are more likely to be exposed to lead from living in homes that contain leaded paint, pipes, faucets, and plumbing fixtures.

The Erie County Department of Health website cites that “despite significant progress, childhood lead poisoning remains a serious problem in Erie County. The same is true for Niagara County and throughout NYS. Every year thousands of children under the age of six are diagnosed with elevated blood lead levels. Thousands more are exposed to lead hazards in their homes every day. Up until 1978, lead was used in many house paints. Even today, deteriorating lead-based paint in homes can lead to high (and unsafe) concentrations of lead in house dust. Conditions that give rise to lead poisoning can be found anywhere in Erie County, however they are especially prevalent in neighborhoods that have a high amount of older housing. Nine of the county's zip codes which lie within the City of Buffalo - 14201, 14207, 14208, 14209, 14210, 14211, 14212, 14213, and 14215 - have been designated by the Department of Health as “Communities of Concern,” where children are at exceptionally high risk for lead poisoning.”<sup>98</sup>

The CDC recommends that healthcare providers and public health professionals focus blood lead testing efforts on neighborhoods and children at high risk, based on age of housing and social and demographic risk factors. The Centers for Medicare and Medicaid Services requires all children enrolled in Medicaid to get tested for lead at ages 12 and 24 months, or age 24–72 months if they have never been tested. Federal agencies, health departments, providers, communities, and other partners are encouraged to focus resources on children with the highest levels of lead in their blood compared with levels in most children in that age range, identify and eliminate sources of lead exposure, and take more prompt actions to reduce the harmful effects of lead. Environmental remediation and lead screening programs for children are helping to combat this major public health concern.

- Of children born in 2016, the percentage of children with at least two lead screenings by 36 months was 75.3% in Erie County and 71.4% in Niagara County, and the NYS rate was 63.3%.<sup>99</sup>

### Diabetes in Children

According to the Centers for Disease Control (CD), children, teens and young adults are more likely to develop Type 1 diabetes, and accounts for 5% of all cases of diabetes. This type of diabetes is also referred to as insulin-dependent diabetes. Those with Type 1 diabetes must take insulin or other medications daily. This compensates for insufficient amounts of insulin, a hormone required to translate blood glucose into energy for the body. Type 1 diabetes was previously known as juvenile diabetes because it is usually diagnosed in children and young adults. However, this chronic, lifelong disease can strike at any age. Those with a family history of Type 1 diabetes have a greater risk.<sup>100</sup>

- The Erie County hospitalization rate for short-term complications of diabetes per 10,000, aged 6-17, was 4.4 , and in Niagara County, the rate was 4.6 as compared to the NYS rate of 2.3.<sup>101</sup>

### Disability and Children

According to the Centers for Disease Control (CDC), developmental disabilities are a group of conditions due to an impairment in physical, learning, language, or behavior areas. These conditions begin during the developmental period, may impact day-to-day functioning, and usually last throughout a person's lifetime.<sup>102</sup>

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<sup>98</sup> Erie County Department of Health – <http://www2.erie.gov/health/index.php?q=lead-poisoning-prevention>

<sup>99</sup> 2016-2019NYS Department of Health, Child Health Lead Poisoning Prevention Program data as of September 2021

<sup>100</sup> American Heart Association, [www.heart.org](http://www.heart.org)

<sup>101</sup> NYS Department of Health, 2017-2019 SPARCS, Data as of November 2021

<sup>102</sup> CDC, <https://www.cdc.gov/ncbddd/developmentaldisabilities/facts.html>

In 2020–21, the number of students ages 3–21 who received special education services under the Individuals with Disabilities Education Act (IDEA) was 7.2 million, or 15 percent of all public school students. Among students receiving special education services, the most common category of disability was specific learning disabilities (33 percent).<sup>103</sup>

- The percentage of children less than 18 years old with a disability in Erie County is 0.5% and 0.6% in Niagara County versus the NYS rate of 0.4%.<sup>104</sup>

The New York State Early Intervention Program (EIP) is part of the national Early Intervention Program for infants and toddlers with disabilities and their families. Children must be under 3 years of age and have a confirmed disability or established developmental delay, as defined by the State, in one or more of the following areas of development: physical, cognitive, communication, social-emotional, and/or adaptive. The EIP offers a variety of therapeutic and support services to eligible infants and toddlers with disabilities and their families.<sup>105</sup>

- The percentage of children birth to 3 years provided services by the Early Intervention Program in 2020 is 4.8% in Erie County, 5.8% in Niagara County and 3.8% for NYS. This is the number of children served in the Early Intervention Program compared to all children ages birth to three in the municipality.<sup>106</sup>
- The percentage of positive responses from families exiting the Early Intervention Program using the Family Outcomes Survey from July 2019 – June 2020 was 94.7% for Erie County, 98.5% for Niagara County, and 93.9 for NYS.<sup>107</sup>

### Child Abuse, Neglect, Trauma

The CDC defines child maltreatment to include all types of abuse and neglect of a child under the age of 18 by a parent, caregiver, or another person in a custodial role (e.g., clergy, coach, teacher). There are four common types of maltreatment: Physical Abuse, Sexual Abuse, Emotional Abuse, and Neglect. In 2015, there were 683,000 victims of child abuse and neglect reported to Child Protective Services (CPS), and the youngest children are the most vulnerable with about 24% of children in their first year of life experiencing victimization. Child abuse affects the overall health and wellness of children as a social determinant of health. Western New York has a high incidence of child abuse and neglect rates as compared to all of NYS.

- The NYS rate/per 1,000 of child abuse/maltreatment of youth 0-17 years in 2020 was 14.6 while the Erie County rate was 21.4 and the Niagara County rate was 19.9%.<sup>108</sup>

### **Maternal and Infant Health**

"Improving the well-being of mothers, infants, and children is an important public health goal for the United States. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system." - Healthy People 2020

The health of women, infants, children and their families is fundamental to population health and is a priority area for the 2019-2024 NYS Prevention Agenda. Erie County and Niagara County both have high rates of infant and maternal mortality, premature birth, low birthweight babies, and teen pregnancy rates.

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<sup>103</sup> COE - Students With Disabilities (ed.gov)

<sup>104</sup> US Census, 2020 American Community Survey 5 Year Estimates

<sup>105</sup> NYS Department of Health [https://www.health.ny.gov/community/infants\\_children/early\\_intervention/](https://www.health.ny.gov/community/infants_children/early_intervention/)

<sup>106</sup> NYS Department of Health, 2020, [https://www.health.ny.gov/statistics/community/infants\\_children/early\\_intervention/](https://www.health.ny.gov/statistics/community/infants_children/early_intervention/)

<sup>107</sup> NYS Maternal and Child Health Dashboard, Early Intervention New York Family Survey as of September, 2021

<sup>108</sup> Kids Well Being Indicators Clearinghouse with data from the NYS Office of Child and Family Services/National Child Abuse and Neglect Data System

These rates are affected by multiple disparities including race, poverty, and lack of access to quality prenatal care, as well as other social determinants of health such as obesity, smoking, substance use, and mental health disorders.

Birth rates for Erie County and Niagara County and maternal mortality rates:

- The 2017-2019 birth rate for Erie County is 17.1%, and the Niagara County birth rate is 17.2%.
- The 2019 Erie County maternal mortality rate per 100,000 live births is 13.6 (The rate/percentage is unstable or unreliable/the rate in 2014-2016 was 33.2 while the Niagara County rate is 31.8 (The rate/percentage is unstable or unreliable/the rate in 2014-2016 was 92.9). The NYS rate is 20.4.

About 1,200 NYS infants under one year of age die each year. Most of these deaths are attributed to congenital abnormalities and birth defects, multiple births, prematurity and low birth weight, infections and diseases. About 7.5% of NYS infant deaths are referred to as sudden unexpected infant deaths (SUID) and are attributed to unsafe sleep practices or, because no cause can be identified, labeled as SUID. Through education and promotion, SUID is an avoidable cause of death among infants.<sup>109</sup> Erie County and Niagara County infant mortality rates have improved in recent years but continue to be higher than NYS rates:

- The 2017-2019 infant mortality rate per 1,000 live births (<1 year) for Erie County is 5.6, and the rate for Niagara County is 5.4 while the NYS rate is 4.4.<sup>110</sup>
- Infant mortality rates in Erie County demonstrate significant racial disparities given that the 2017-2019 rate per 1,000 live births is 9.6 among the Black population and 9.6 among the Hispanic Population and 4.0 among the White Population.<sup>111</sup>

#### Low Birthweight, Premature Birth and Lack of Prenatal Care

Poor maternal and infant health outcomes, including low birthweight births and premature births, are evident throughout Erie and Niagara counties.

- The 2017-2019 percentage of low birthweight births (<2.5 kg) is 8.8% in Erie County, 6.6% in Niagara County versus the NYS rate of 8.1%.
- Premature births (<37 weeks gestation) account for 10.1% of all Erie County births and 9.8% of all Niagara County births versus the NYS rate of 9.0% (2017-2019).<sup>112</sup>
- Low birthweight and premature birth rates are even higher in the City of Buffalo, a city with a 28.3% poverty rate and 52.9% minority population.<sup>113</sup> In Buffalo, the rate of low birthweight births (<2.5 kg) in 2016-2018 is 9.4% versus 6.8% in Erie County.<sup>114</sup> Rates in the city's designated "high risk" zip codes in 2017-2019 range from 17.2% in 14203, 14.8% in 14204, 14.3% in 14211, 11.4% in 14212, and 15.4% in 14215. These rates have increased since last reported in 2012-2014 when rates in these high-risk zip codes ranged from a high of 13.6 in 14204 to a low of 11.9 in 14215.
- The 2017-2019 rates of premature birth are highest in the City of Buffalo, especially within the city's designated high-risk zip codes. Premature birth rates range from 12.5% in zip code 14203,

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<sup>109</sup> NYS Department of Health

<sup>110</sup> 2017-2019, NYS Vital Statistics as of October 2021

<sup>111</sup> 2016, NYS SPARCS data as of December 2019

<sup>112</sup> 2017-2019, NYS Vital Statistics data as of January 2022

<sup>113</sup> US Census, Quick Facts as of April 1, 2020

<sup>114</sup> City of Buffalo Health Equity Report, NYSDOH April 2021

16.1% in 14204, 13.7% in 14207, 16.6% in 14211, 14.8% in 14212, 14.5% in 14213, 14.5% in 14214, and 18.2% in 14215.<sup>115</sup>

Racial disparities in birth outcomes further exist in Erie County:

- The percentage of low birthweight babies in Erie County is 14.0% among the African American/black population and 12.7% among the Hispanic population, while just 6.7% among the White population.
- The percentage of premature births (<37 weeks) in Erie County is 8.6% among the white population and 13.8% among the African American/black population and 13.8% among the Hispanic population and just 6.9% among the White population
- The percentage of births with adequate prenatal care per APNCU (Adequacy of Prenatal Care Utilization Index) is 69.1% among the Black population, 74.2% among the Hispanic population while the rate is 80.0% among the White population.<sup>116</sup>

Poverty and behavioral and socio-economic factors such as poor nutrition, smoking, obesity, substance abuse, mental health status, as well as teen pregnancy, and a lack of adequate prenatal care and education are all contributing factors for poor infant and child health outcomes.<sup>117</sup>

- Teen pregnancy rates, 2017-2019, ages 15-19, per 1,000 females is 25.2%% for Erie County and 26.3% for Niagara County while the NYS rate is 22.8%. However, rates in the City of Buffalo's high-risk zip codes range as high as 96.8% in zip code 14212, 84.7% in 14211, 78.0% in 14215, 65.3% in 14207, 54.4% in 14202, and 56.4% in 14204.<sup>118</sup>

A lack of prenatal care puts all pregnant women at risk of poor maternal and infant health outcomes.

- Erie County births for 2017-2019 with late (3<sup>rd</sup> trimester) or no prenatal care is 4.2% and the rate in Niagara County is 6.7%. The NYS rate is 5.4%. Rates are significantly higher Buffalo's high-risk zip codes with 9.9% in 14212, 8.6% in 14203, 8.5% in 14215, 7.1% in 14202, 7.0% in 14206.<sup>119</sup>

Obesity is a serious problem for all Erie County and Niagara County residents. However, the risk to pregnant women and their newborns is of particular concern as poor nutrition is a risk factor for preterm birth.

- The percentage of pregnant women in WIC who were pre-pregnancy obese (BMI  $\geq$  30) was 33.2% for Erie County, 33.2% for Niagara County, and 27.4% for NYS (2015-2017).<sup>120</sup>

The current opiate addiction crisis in Erie and Niagara counties along with other substance abuse issues has impacted maternal and infant health outcomes.

- Newborns with neonatal withdrawal symptoms and/or affected by maternal use of drugs of addiction (any diagnosis), crude rate per 1,000 newborn discharges is 22.7 for Erie County and an even higher rate of 40.8 in Niagara County as compared to 9.0 for NYS.<sup>121</sup>

## Breastfeeding

Breastfeeding among new mothers and their infants has significant health benefits as outlined in the 2011 US Surgeon General's Call to Action to Support Breastfeeding:

<sup>115</sup> 2017-2019, NYS Vital Statistics data as of January 2022

<sup>116</sup> NYS Department of Health, 2017-2019 Erie County Health Indicators by Race/Ethnicity

<sup>117</sup> <https://www.healthypeople.gov/2020/topics-objectives/topic/family-planning>

<sup>118</sup> 2017-2019, NYS Vital Statistics data as of January 2022

<sup>119</sup> 2017-2019, NYS Vital Statistics data as of January 2021

<sup>120</sup> 2015-2017, NYS Department of Health, NYS Pregnancy Nutrition Surveillance System – WIC Program Data as of November 2021

<sup>121</sup> 2018, NYS SPARCS Data as of January 2021

- Breastfeeding protects babies from infections and illnesses that include diarrhea, ear infections and pneumonia.
- Breastfed babies are less likely to develop asthma.
- Children who are breastfed for six months are less likely to become obese.
- Breastfeeding also reduces the risk of sudden infant death syndrome (SIDS).
- Mothers who breastfeed have a decreased risk of breast and ovarian cancers.

While the benefits of breastfeeding are promoted among new mothers, there is more work to be done to increase rates throughout Erie and Niagara counties.

- The percentage of infants fed any breast milk in a delivery hospital in 2017-2019 was 76.0% for Erie County, 70.9% for Niagara County, much lower than the NYS rate of 88.6%.
- The percentage of infants fed exclusively breast milk in a delivery hospital in 2017-2019 was 45.8% for Erie County, 45.6% for Niagara County and the NYS rate was 47.1%.<sup>122</sup>

Disparities exist for breastfeeding among low income and minority populations as evidenced by the following data for the City of Buffalo, a city with a 28.3% poverty rate and a 52.9% minority rate.<sup>123</sup>

- The percentage of infants exclusively breastfed in a hospital, 2016-2018, was 33.6% in the City of Buffalo versus the Erie County rate of 47.5%.<sup>124</sup>

### Sexually Transmitted Diseases/HIV

Sexually transmitted diseases are highly prevalent among Erie County and Niagara County youth as evidenced by the following data:

- The 2017-2019 newly diagnosed HIV case rate per 100,000 population is 6.8 for Erie County and 2.9 for Niagara County versus the New York State (NYS) rate of 13.1.<sup>125</sup>
- The 2017-2019 AIDS mortality rate per 100,000 for is 0.7 for Erie County and 0.3 for Niagara County as compared to 2.2 for New York State.<sup>126</sup>
- The early syphilis case rate per 100,000 population is 10.1 for Erie County and 2.7 for Niagara County, while the NYS rate is much higher at 34.5.
- The gonorrhea case rate per 100,000 population, 15 to 19 years, is 744.0 for Erie County and 495.4 for Niagara County, and the rate is 401.5 for NYS.
- The chlamydia case rate per 100,000 females, 15 to 19 years, is 4,140.6 for Erie County, 4,349.7 for Niagara County and 3,535.7 for NYS.
- The chlamydia case rate per 100,000 males, 15 to 19 years, is 1,417.6 for Erie County, 859.3 for Niagara County and 1,142.6 for NYS.<sup>127</sup>

### **Mental Health and Substance Use**

High rates of poor mental health, substance use, and suicide deaths in Erie County and Niagara County as indicated below document the need to address mental health and substance use issues in both counties.

- Frequent mental distress during the past month among adults, age-adjusted percentage is 14.1 for Erie County, 21.8 for Niagara County, and 11.2 for NYS.<sup>128</sup>

<sup>122</sup> 2017-2019, NYS Vital Statistics Data as of October 2021

<sup>123</sup> US Census, Quick Facts, April 1, 2020

<sup>124</sup> 2016-2018 NYS Department of Health, Buffalo Health Equity Report 2021

<sup>125</sup> 2017-2019, NYS Department of Health, NYS HIV Surveillance System data as of June 2020

<sup>126</sup> 2017-2019 NYS Vital Statistics, data as of January 2022

<sup>127</sup> 2017-2019, NYS Department of Health, Bureau of Sexual Health and Epidemiology data as of September 2021

<sup>128</sup> 2018, NYS Expanded Behavioral Risk Factor Surveillance System as of August 2020

- The 2017-2019 age-adjusted suicide death rate per 100,000 is 11.0% in Erie County and 11.2 in Niagara County versus the NYS rate of 8.2%.<sup>129</sup>
  - Among the white population of Erie County, the 2017-2019 age-adjusted suicide death rate per 100,000 is 12.3 while it is 8.2 among the Hispanic population, and 5.8 among the Black population. In Niagara County, the rates are 12.0 among the white population, 7.2 among the Black population and 6.4 among the Hispanic population.<sup>130</sup>
- Age-adjusted percentage of adult binge drinking during the past month is 20.2% in Erie County and 15.4% in Niagara County versus the NYS rate of 17.5%.<sup>131</sup>

The COVID-19 pandemic has amplified mental health challenges such as anxiety and depression since it began in 2020. In any disaster or crisis, there are different emotional reactions to different phases. While the initial COVID-19 surge has passed in New York, it continues to be important to understand the mental health effects of the pandemic and the coping skills and resources that may help. Furthermore, access to mental health care and services is a challenge for residents in both Erie and Niagara counties. The region has a severe shortage of psychiatrists and psychologists.

- The mental health provider rate for Erie County is 280:1 while the rate for Niagara County is 720:1 and the rate for NYS is 310:1. 2022 County Health Rankings.<sup>132</sup>

In 2015 and 2016, opioid use increased dramatically in NYS, and the counties of Erie and Niagara were largely impacted. Since that time, NYS and both Erie County and Niagara County put together task forces comprised of varied community stakeholders to combat the problem. Public education on the dangers of opioid use and addiction increased and Naloxone (Narcan) was increasingly used by EMS, police, and emergency department providers to immediately counteract the negative effects of opioid overdose.

Additionally, the NYSDOH Buprenorphine Access Initiative began in July 2016 for practitioners to take specialized training and receive federal certification (“waiver”) and then prescribe buprenorphine to their patients in general practice settings to treat opioid dependence and addiction. By incorporating buprenorphine prescribing more broadly, individuals will have access to buprenorphine at a range of settings including primary care clinics, harm reduction programs, Federally Qualified Health Centers, EDs, obstetrician and gynecologists’ offices, housing services, jails and prisons, and other community-based organizations.

While the opioid burden rate decreased from 2016 to 2019, it has increased again in 2020 and 2021; and affects individuals of all races and backgrounds.

- In 2016, the opioid burden (crude rate per 100,000 population) was 352.2 in Erie County and 416.5 in Niagara County, some of the highest rates in NYS.
- The 2019 opioid burden (including outpatient ED visits and hospital discharges for non-fatal opioid overdose, abuse, dependence, and unspecified use; and opioid overdose deaths), crude rate per 100,000 population in Erie County is 229.0, 296.2 in Niagara County and 249.8 in NYS.
- The 2017-2019 age adjusted opioid burden per 100,000 in Erie County is 272.9 among the Hispanic population, 244.9 among the white population, and 177.2 among the Black population. In Niagara County, the rates were 360.3 among the Hispanic population, 340.6 among the Black population, and 303.9 among the white population.<sup>133</sup>

<sup>129</sup> 2017-2019, NYS Vital Statistics data as of January 2022

<sup>130</sup> NYS Department of Health, 2017-2019 County Health Indicators by Race/Ethnicity

<sup>131</sup> 2018, NYS Expanded Behavioral Risk Factor Surveillance System as of August 2020

<sup>132</sup> 2022, County Health Rankings

<sup>133</sup> 2017-2019 County Health Indicators by Race/Ethnicity



- Opioid use includes both synthetics and heroin, and the problem has become exacerbated by the lacing of opioids with deadly additives such as fentanyl.
- All 2019 emergency department visits (including outpatients and admitted patients) involving opioid overdose excluding heroin (incl. illicitly produced opioids such as fentanyl), crude rate per 100,000 population - Aged 18-44 years is 40.7 for Erie County and significantly higher for Niagara County with a rate of 71.7 and the NYS rate is 30.6.<sup>134</sup>
- It has been well documented that in 2020, the COVID-19 pandemic and its accompanying health, social and economic worries brought about high rates of mental health issues, suicide and substance use and misuse.

**Below table shows how rates of death, emergency department visits and hospitalizations caused by opioid overdoses increased significantly in 2020 over the 2019 rates and then decreased slightly in 2021.**

<b>Opioid Overdoses and Crude Rates Per 100,000 Population – 2019, 2020, 2021 Totals</b>				
<b>NYS County Opioid Quarterly Reports, NYS Department of Health – Published October 2020 and July 2022</b>				
<b>Indicator</b>	<b>Location</b>	<b>2019 Total No./Rate</b>	<b>2020 Total No./Rate</b>	<b>2021 Total No./Rate</b>
Deaths all opioid overdoses	Erie County	102/11.1	229/24.9	187/20.3
	Niagara County	29/13.7	65/30.7	58/27.4
	NYS excl. NYC	1390/12.4	2521/22.5	2191/19.5
ED Visits – all opioid overdoses	Erie County	502/54.5	637/69.2	583/63.3
	Niagara County	108/51.0	186/87.8	146/68.9
	NYS excl. NYC	5479/48.9	6257/55.8	6076/54.2
Hospitalizations – all opioid overdoses	Erie County	128/13.9	147/16.0	113/12.3
	Niagara County	33/15.6	24/11.3	23/10.9
	NYS excl. NYC	1531/13.7	1628/14.5	1514/13.5

Increased use of naloxone has helped to decrease the number of fatalities from overdoses and medication assisted and other treatment programs are expanding throughout the counties.

- Patients in 2020 who received at least one buprenorphine prescription for opioid use disorder, age-adjusted rate per 100,000 population is 765.0 for Erie County, 1,374.4 for Niagara County and 270.7 for NYS. ( 2020 Prescription Monitoring Program (PMP) Registry, data as of June 2021)
- Unique 2020 naloxone administrations by EMS agencies, crude rate per 1,000 unique 911 EMS dispatches is 5.0 for Erie County, 4.7 for Niagara County and 5.6 for NYS.<sup>135</sup>
- Admissions in 2020 to OASAS-certified substance use disorder treatment programs for any opioid (incl. heroin), crude rate per 100,000 population - Aged 12+ years is 536.9 for Erie County and significantly higher in Niagara County with a rate of 880.2 and the NYS rate is 501.9.<sup>136</sup> The opioid problem is further compounded by opioid addiction among pregnant women.
- Newborns with neonatal withdrawal symptoms and/or affected by maternal use of drugs of addiction (any diagnosis), crude rate per 1,000 newborn discharges in 2019 was a high of 41.0 in Niagara County, 21.0 in Erie County, as compared to only 7.9 for all of NYS.<sup>137</sup>

### Unintentional Injury and Falls

<sup>134</sup> 2019, SPARCS Data as of November 2021.

<sup>135</sup> 2020 EMS Data as of November 2021

<sup>136</sup> 2020 OASAS Data as of October 2021

<sup>137</sup> 2019, NYS SPARCS data as of November 2021

Unintentional injury and falls affects the health and quality of life of a community.

- The 2017-2019 unintentional injury hospitalization rate (crude) per 10,000 is 71.5 for Erie County, 75.2 for Niagara County and 72.1 for NYS.
- The falls hospitalization rate (crude) per 10,000 is 45.4% in Erie County, 47.1% in Niagara County and 42.4% for all of NYS.<sup>138</sup>

Rates of unintentional injury and falls increases among the older population, a growing population nationally and in Erie and Niagara Counties. In Erie County, the population 65 years and older is 18.4% of the general population and in Niagara County the percentage is 19.5% while the NYS percentage is 16.9%.<sup>139</sup>

- The 2017-2019 rate of unintentional injury hospitalizations per 10,000 among those 65 years and over is 244.4 in Erie County and 239.9 in Niagara County while the NYS rate is 249.9.
- The 2017-2019 rate of hospitalizations due to falls per 10,000 population for:
  - Erie County is 82.1 for ages 65-74, 219.9 for ages 75-84 and 551.1 for ages 85 and older;
  - Niagara County is 84.1 for ages 65-74, 233.5 for ages 75-84 and 527.0 for ages 85 and older
  - NYS is 80.3 for ages 65-74, 215.9 for ages 75-84 and 553.5 for ages 85 and older<sup>140</sup>

## Environment

A community's physical environment influences the health and wellness of its residents. The 2022 County Health Rankings on physical environment rank Erie County at 29 and Niagara County at 44 out of 62 NYS counties. This ranking is based on a summary composite score calculated from the following measures: daily fine particulate matter, drinking water violations, severe housing problems, driving alone to work, and long commute while driving alone.

The 2022 County Health Rankings report the following:

- The 2018 average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) in 2018 is 7.6 for Erie County, 8.7 for Niagara County, and 6.9 for NYS.

Negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects.[1] Long-term exposure to fine particulate matter increases premature death risk among people age 65 and older, even when exposure is at levels below the National Ambient Air Quality Standards.[2] These harmful particles can be directly emitted from sources such as forest fires, or they can form when gases emitted from power plants, industrial operations, and automobiles react in the air. Almost 65,000 premature US deaths were related to adverse effects of outdoor fine particulate matter, and minority populations and those living in poverty are more likely to be exposed.

- Both Erie and Niagara counties have no drinking water violations.
- The percentage of residents with severe housing problems are is 15% for Erie County, 23% for Niagara County and 23% for NYS.
- The percentage of residents driving alone to work is 80% for Erie County, 83% for Niagara County and 52% for NYS.
- The percentage of resident with a long commute- driving alone is 24% for Erie County, 32% for Niagara County and 39% for NYS.<sup>141</sup>

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<sup>138</sup> 2019, NYS SPARCS data as of November 2021

<sup>139</sup> US Census Quick Facts as of April 1, 2020

<sup>140</sup> 2017-2019 NYS SPARCS data as of November 2021

<sup>141</sup> 2022 County Health Rankings and Roadmaps

Additionally:

- The percentage of people who commute to work using alternate modes of transportation (e.g., public transportation, carpool, bike/walk) or who telecommute is 17.4% for Erie County, 13.1% for Niagara County and 45.6% for NYS.
- The percentage of residents served by community water systems that have optimally fluoridated water is 98.2% for Erie County, 100% for Niagara County and 71.1% for NYS. (NYS Prevention Agenda Dashboard, 2019 Safe Drinking Water Systems (SDWIS) data as of August 2021.<sup>142</sup>

The physical environment includes all of the parts of where individuals live and work (e.g., homes, buildings, streets and parks). The environment influences a person's level of physical activity and ability to have healthy lifestyle behaviors. For example, inaccessible or nonexistent sidewalks or walking paths increase sedentary habits. These habits contribute to obesity, cardiovascular disease and diabetes. Other factors that contribute to healthy lifestyle behaviors are access to grocery stores and farmer's markets, recreation facilities, and the presence of a clean and safe physical environment.<sup>143</sup>

### Violence and Crime

A violent crime is a crime in which the offender uses or threatens to use violent force upon the victim. According to the FBI'S Uniform Crime Reporting Program, violent crime includes four offenses: murder and non-negligent manslaughter, rape, robbery, and aggravated assault. Violence negatively impacts communities by reducing productivity, decreasing property values, and disrupting social services.<sup>144</sup> Violence and crime in a community further the health and well-being of its residents and children.

Data surveillance is a fundamental tool in injury prevention. Data surveillance systems are used to identify at-risk populations, predict patterns, and recognize risk factors. The most recent data available shows that injuries are the leading cause of death for New Yorkers ages 1 through 34 years and are among the top causes of death for all other age groups. Nearly 8,000 New Yorkers die every year as a result of injury. Additionally, injuries are consistently among the leading causes of hospitalization for all age groups. More than 155,000 individuals are injured severely enough to require hospitalization annually. Another 1.5 million injured New Yorkers are treated and released from an emergency department each year.<sup>145</sup>

Below statistics exemplify the high rates of crime and violence in Erie and Niagara counties.

- The 2019 Index Crime Rate (crude) per 100,000 is 2,277.2 for Erie County, 1,983.4 for Niagara County and 1,723.2 for NYS.<sup>146</sup>
- The violent crime rate per 100,000 population is 388.2 in Erie County, 291.8 in Niagara County, and 350.6 for NYS.<sup>147</sup> The 2017-2019 Homicide Mortality rate is 6.6 for Erie County, 2.7 for Niagara County and 3.1 for NYS.<sup>148</sup>
- The 2017-2019 assault- hospitalization rates per 10,000 population is 2.3 for Erie County, 1.8 for Niagara County and 3.0 for NYS.<sup>149</sup>

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<sup>142</sup> NYS Prevention Agenda Dashboard, 2019 Safe Drinking Water Systems (SDWIS) data as of August 2021

<sup>143</sup> 2022 County Health Rankings and Roadmaps.

<sup>144</sup> <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/topic-pages/violent-crime>

<sup>145</sup> NYS Department of Health [https://www.health.ny.gov/statistics/prevention/injury\\_prevention/](https://www.health.ny.gov/statistics/prevention/injury_prevention/)

<sup>146</sup> CHIRS – NYS Office of Justice Research and Performance, data as of June 2021

<sup>147</sup> 2018, NYS Division of Criminal Justice Services

<sup>148</sup> CHIRS – Vital Statistics Data as of January 2022

<sup>149</sup> 2017-2019, NYS SPARCS data as of November 2021

## **Community Engagement**

Kaleida Health participated in collaborative efforts to develop the 2022-2024 Community Health Assessment – Community Health Improvement Plan (CHA-CHIP) for both Erie County and Niagara County. The goal of each county Department of Health and its partners, as required by the New York State Department of Health, was to identify two priority areas from the 2019-2024 NYS Prevention Agenda based on data and health areas of concern among county residents along with one disparity. Kaleida Health is supporting the development of the Erie County CHA-CHIP and the Niagara County CHA-CHIP and is incorporating the county priority areas into its own Community Health Needs Assessment-Community Service Plan (CHNA-CSP) for its primary service areas of Erie County and Niagara County, in compliance with New York State Department of Health and IRS 501(r) (3) requirements.

As a part of the engagement process, the county work groups and Kaleida Health reviewed health data from the County Health Rankings, New York State Department of Health (NYSDOH), NYS Prevention Agenda Dashboard, Keys to Health of the Population Health Collaborative, NYS Vital Records, NYS Statewide Planning and Research Cooperative system (SPARCS), NYS Expanded Behavioral Risk Factor Surveillance Survey (eBRFSS) and other sources as well as information gathered from community input through consumer health surveys, community conversations and focus group sessions. Additionally, Kaleida Health engaged its staff and other stakeholders in the process through a CHNA-CSP Steering Committee.

### **Erie County**

Kaleida Health participated in the collaborative planning and community engagement process of a work group led by the Erie County Department of Health to identify NYS Prevention Agenda priorities to address in 2022-2024. Kaleida Health hospitals located in Erie County are Millard Fillmore Suburban Hospital in Williamsville, NY; Buffalo General Medical Center/Gates Vascular Institute in Buffalo, NY; and John R. Oishei Children's Hospital in Buffalo, NY. Partnering organizations included: American Heart Association, Buffalo State College (SUNY), Catholic Health System, D'Youville University, Erie County Department of Health, Kaleida Health, New York State Public Health Corps/CSSI for Erie County Department of Health, Population Health Collaborative of WNY, United Way of Buffalo & Erie County, and the University at Buffalo (SUNY) Department of Epidemiology and Environmental Health.

The Erie County work group launched their efforts on December 2, 2021 and held regular meetings throughout 2021-2022 both virtually and in-person at the Erie County Fire Training Facility. The Erie County work group collaborated to conduct a Consumer Health Survey, Community Conversations and Professional Stakeholder Focus Group Sessions to solicit input from the community, including the underserved, on the health status and health challenges of Erie County residents.

#### **Erie County Consumer Survey**

The Erie County work group developed an Erie County Consumer Survey and disseminated the survey both in electronic and print formats throughout the county beginning December 2021 through April 2022. A representative sample of Erie County residents were surveyed to determine health status and community health needs, health behaviors, barriers to health, healthcare access and utilization, and demographic information. Prior to survey distribution, the Erie County Department of Health and the hospital partners reviewed the survey questions and made any changes as needed. There were several distribution sites, and efforts were made to target the low income and underserved population at sites including the office of the Erie County Department of Social Services, St. Luke's Mission of Mercy - Buffalo, Tops Markets/Amherst St., Niagara St. - Buffalo, Save-A-Lot/Abbott Rd. - Lackawanna, Erie County Vaccination Pods – various locations, among others. Surveys were disseminated virtually to Erie County

residents through public websites, employee/associates intranet, Facebook, Instagram, Twitter of Erie County Department of Health, Catholic Health System, and Kaleida Health. Completed surveys were received from 1,394 individuals.

- Of the 1,347 respondents answering a Race/Ethnicity question, answers were as follows: 79.0% - White, 8.7% - Black or African American, 2.5% - Asian, 2.2% - Hispanic or Latino, 4.6% - Other, and 3.0% - Prefer Not to Answer.
- Of the 1,357 respondents answering a Gender question, answers were as follows: 76.0% - Female; 21.0% Male; .07% - Non-Binary, Transgender, Other; and 2.3% Prefer Not to Answer.
- Of the 1,366 respondents answering a COVID Vaccine question, answers were as follows: 88.2% - Received Vaccine and 11.8% - Did Not Receive Vaccine.
- Of the 1,366 respondents answering the question “How would you rate your overall health?”, answer were as follows: 61.3% - Good, 19.3% - Fair, 16.9% - Excellent, and 2.5% - Poor.
- The top five health issues identified by respondents are: Mental Health, COVID 19, Cancer, Depression, and Opioid Use Disorder.
- The top five answers to the question, “In the future, what might help you make healthy changes in your life?”, are:
  - More Free Time
  - More affordable and accessible recreational and/or sports opportunities that are appropriate for your age and skill level
  - Having more affordable fresh fruits and vegetables and/or healthy food choices available at local convenience stores
  - Access to virtual and/or in person free workshops or classes in your community on exercise, diet, stress reduction, chronic disease management and/or quit smoking
  - Having more trust/comfort with the medical system

#### Erie County Community Conversations

Three virtual community conversations and four, in-person community conversations were held in March and April 2022 with 93 total participants. Additionally, 63 individual conversations took place in March, April and June utilizing the same questions posed to the groups. With the exception of one suburban location, the locations of the conversations were chosen in an effort to increase input from the Hispanic, African American, low income, male and rural populations, whose views were underrepresented in Community Survey responses. Sites included St. Luke’s Mission of Mercy, Springville Auction/Farmer’s Market, East Aurora Farmer’s Market, Los Tainos Senior Group, Bridge Masters Group, and the Erie County Department of Social Services.

The questions posed were about:

- experiences with healthcare during and since the COVID-19 pandemic,
- health care access,
- barriers to health service access,
- health concerns of the community; and
- participants’ thoughts as to how we can best achieve a healthy community.

Participant feedback included the following:

- 64% of participants reported that they were not able to see or speak to a health care provider at least one time over the past 2 years (April 2020 – April 2022).
- 52% answered that telehealth was offered by their health care professional (HCP) and for those who said they were unable to get an in-person appointment, 20% said a telehealth appointment was an option, but they declined.

- 73% of participants believed that their HCP did consider the connection between mental and physical health, 20% said they did not know, and 7% said their provider did not consider that connection.
- 98% of participants reported that their health care was negatively affected during the first six months of the pandemic. Comments included: they could not get in to see their HCP when they were sick, they had trouble getting refills for their medication, ongoing treatments and therapy that required hands-on application ceased, many people suffered great setbacks in recovery and/or their conditions worsened, it often took days for their HCP provider to call them back and sometimes they never heard back from their provider, if someone had to find a new provider it was almost impossible to find one taking new patients, especially for patients insured with Medicaid or Medicare, they were unable to get tested for COVID early on. Four participants reported that a family member had died during the first two months of the pandemic from a pre-existing disease/condition because they were unable to access treatment and services.
- In answer to the question “What do you think is the biggest health concern in your community?”, there were many health concerns expressed including the following:
  - 47% of participants indicated Social Determinants of Health (broken down further into 2 categories)
  - 31% - Income/Cost of Living/Poverty related (income, lack of resources, inflation, high costs of insurance, low wage –long hours, underinsured, unemployment, increasing housing cost, poor housing making most working people housing-burdened (by federal definition, over 30% of income used for basic housing costs)
  - 16%- Access to Essential Resources (education, transportation, good jobs, health care, healthy and affordable food and affordable and/or free wellness and physical activity opportunities). This also includes concerns about environmental conditions and concerns about distance from healthcare provider.
  - 21% of participants indicated Mental Health (includes substance use disorders),
  - 16% of participants indicated Disease Specific
  - 16% of participants indicated Distrust of Large Institutions (government, political & corporate conspiracies, distrust of research, the medical profession, traditional media, social media and mis/disinformation).

#### Erie County Professional Stakeholder Focus Group Sessions

In February and March 2022, the Erie County Department of Health, Kaleida Health and Catholic Health System hosted three professional stakeholder focus group sessions to gather information for the 2022-2024 Erie County Community Health Assessment and the hospitals’ Community Health Needs Assessments. Professionals from health, mental health and social services organizations provided input on the community’s current health status, needs and issues. A representative from the Population Health Collaborative facilitated the sessions. The sessions were held via Zoom on February 28, 2022, March 1, 2022, and March 4, 2022 and included 16 participants primarily from community-based outpatient sites of Catholic Health System and Kaleida Health; and also included representatives from Univera Healthcare and the University at Buffalo.

Topics and comments included:

- **Culturally Appropriate Services** - While Stakeholders made it clear that most healthcare systems are now prioritizing culturally appropriate services, it is not without barriers. Most Stakeholders felt their organizations could use more support and resources to improve the level of culturally appropriate care they provide. Some Stakeholders noted that while efforts to implement Diversity, Equity, and Inclusion (DEI) strategies are well received, some staff members have been

resistant to change. This has required additional time and training to ease staff through the transition as well as raise awareness of the importance of culturally appropriate care. The use of Web-Based training for staff on DEI topics has been helpful in providing education and increasing culturally appropriate care. One Stakeholder shared that they have switched from using phone service interpretation such as Language Line to in-person Interpreters. These Interpreters are of and from the community and can participate in the treatment process, providing additional support to the families in treatment.

- **Social Determinants of Health** - The largest barrier and concern for access to care was Social Determinants of Health (SDOH). While all stakeholders recognized this barrier, they also noted that there is a need for increased screening and data collection to identify specific SDOH factors and their impact on patients' ability to access care. Participants indicated the following as SDOH barriers to care for their patients: transportation, food insecurity and nutrition, financial insecurity, lack of support systems and caregivers, domestic partner violence, housing insecurity, implicit bias from the medical system, mental Health and substance use disorders.
- **Telehealth** - The Covid-19 Pandemic certainly created many issues within the Healthcare System, but the pandemic also pushed forward innovations within patient care as providers looked for ways to reach their patients. One such innovation was the widespread acceptance and use of Telemedicine. Many of the stakeholders felt telemedicine was a positive addition to their practices. Telemedicine has helped to address barriers to patient care, reduce wait times for patients, and reduce the impact of SDOH on some patients. The Covid-19 Pandemic expanded coverage for Telemedicine from mainly Medicare to most major insurance companies. Patients were able to access medical care without the burden of finding childcare, paying for transportation, or taking unpaid work absences. Stakeholders commented that while Telehealth was largely positive, there are some barriers including lack of technology among patients and providers to support telehealth and an over-reliance by some patients on telehealth and refusal of in-person physical exams and its benefits. Pediatric stakeholders commented that telemedicine brought up issues surrounding privacy and the ability to gauge child safety. Children have a harder time staying present for medical appointments when done virtually versus in person due to distractions or lack of privacy. Without the ability to see children physically in the office, cases of neglect or abuse can be more easily hidden by family members.
- **Care Coordination and Navigation** -In Healthcare, there has been increased importance placed on the impact of mental health on physical medical care. Stakeholders commented that overall, organizations with built-in mental health programs, screenings, and initiatives were better equipped to address clients' mental health needs than those who relied on linkage to outside services. Access to care was cited as the largest barrier to linking their patients to mental health services. Long wait times combined with a limited number of available mental health professionals create a barrier for health care providers referring patients. Stakeholders recognized that increasing staffing may not be possible, and instead recommended focusing on early screening tools and developing initiatives that would allow health care providers to follow up with clients post referral.
- **COVID-19 Pandemic** - By 2022, the Covid-19 Global Pandemic had overwhelmed healthcare systems and reduced the capacity to deliver essential health services across the world. COVID-19 was a major point of discussion for stakeholders, who recognized its broad impact across all areas of care. COVID-19 was brought up many times over the course of the three focus groups. While the responses are being listed under one central question, it's important to note that stakeholders brought in COVID-19 as a response to nearly every question asked, demonstrating the immense impact the pandemic had on healthcare services. While all areas of care were impacted by Covid-19, there was one area hit particularly hard according to stakeholders: routine care. Stakeholders

noted that routine care was a service deemed non-essential in the pandemic. Therefore, patients who were not comfortable leaving their house would cancel non-essential appointments. Additionally, some stakeholders noted that the required restrictions placed on doctors' offices led to patients getting turned away. This included COVID-19 symptom screenings and visitor limitations. Along with routine care, preventative screenings were also neglected during the pandemic. Stakeholders discussed how screenings were already on the decline, and Covid-19 only worsened the situation. Under COVID-19 restrictions, elective procedures had to be canceled. As such, crucial screenings that went along with those procedures were not completed. Now that restrictions have been lifted, stakeholders are grappling with addressing the gap in screenings.

- **Mental and Behavioral Health** - For stakeholders in the Mental and Behavioral Health Fields, the pandemic created a different set of issues, which they described as a "Community Crisis." Stakeholders working with Pediatric Mental Health, in particular, have seen an increase in children in need of care. There has been a large number of new referrals to mental health services, and more children presenting with eating disorders, anxiety and depression, and suicidal behaviors. Stakeholders also discussed the ways in which Marginalized People in the healthcare system were impacted far worse than other groups. They discussed how those in marginalized groups already had pre-existing conditions and were not being serviced to the level they should when the pandemic hit. These issues were already present, but Covid-19 forced health care systems to address the ongoing needs of marginalized patients.

## **Niagara County**

Kaleida Health's DeGraff Medical Park, located in North Tonawanda, NY, Niagara County, participated in the collaborative planning and community engagement process of a work group led by the Niagara County Department of Health to identify NYS Prevention Agenda priorities to address in 2022-2024. Partners included Catholic Health System – Mount St. Mary's Hospital and Health Center, Eastern Niagara Health System, Kaleida Health – DeGraff Medical Park, Niagara Falls Memorial Medical Center, Niagara County Department of Health, Niagara County Department of Mental Health and Substance Abuse Services, and the Population Health Collaborative, The Niagara County Department of Health and the Population Health Collaborative facilitated the process and meetings on behalf of the group.

After a delay resulting from COVID-19, the Niagara County work group launched their efforts on February 23, 2022 and held regularly scheduled meetings throughout 2022, both virtually and in-person at various partner locations. The Niagara County work group collaborated to conduct a Consumer Health Survey, Focus Group Sessions, and a county-wide Community Stakeholder Event to solicit input from the community, including the underserved on the health status and challenges of Niagara County residents.

### Niagara County Consumer Health Survey

The Niagara County work group developed a Niagara County Consumer Survey that was disseminated both in electronic and print formats throughout the county beginning March through June 2022 (COVID-19 precipitated a delay in the release of the survey). The Population Health Collaborative facilitated the process. A representative sample of Niagara County residents were surveyed to determine health status and community health needs, health behaviors, barriers to health, healthcare access and utilization and demographic information. Survey links were provided on the Niagara County Department of Health's website and social media and shared with the partnering hospitals for additional electronic and print dissemination. In-person survey distribution was also conducted by various Niagara County public agencies and organizations. Kaleida Health and DeGraff Medical Park posted the surveys on the Kaleida Health public website, Kaleida Health employee website, and on Facebook and Twitter. Completed surveys were received from 2,399 individuals. Survey results were as follows:



- Of 1,999 respondents to the question “In the past year, was there any time that you needed medical care but could not - or did not - get it?”, the following answers were indicated:
  - 16.76% - Yes
  - 83.24% - No
- Of the 327 respondents to the question “What were the main reasons you did not get the medical care you needed? Please select all that apply,” the following are the top 5 reasons:
  - 32.72% - I couldn’t get an appointment for a long time
  - 25.38% - Cost, even with insurance it was too expensive
  - 21.41% - Hours, they weren’t open when I could get there
  - 16.21% - I couldn’t get time off from work
  - 13.15% - Cost, without insurance it was too expensive
- Of the 1,861 respondents to the question, “Have you ever been told by a doctor or a nurse that you had any of the following? Please check all that apply,” the following are the top 5:
  - 37.51% - high blood pressure or hypertension
  - 33.52% - high cholesterol
  - 24.34% - extreme overweight, obesity
  - 18.22% - Asthma, COPD or other breathing problems
  - 16.01% Blood sugar problems or diabetes
- Of the 1,883 respondents to the question, “When you think about your own health, or the health of your community, which of the following issues are you most concerned about?”, the following are the top issues:
  - 45.13% - access to affordable health care
  - 25.92% - Cancer
  - 21.83% - Heart related issues (high blood pressure, heart disease, stroke)
  - 17.95% - Access to healthy food
  - 15.19% - Dental Health
  - 13.17% - Alcohol and/or substance abuse

#### Niagara County Provider Survey

A Niagara County Provider Survey was sent to Primary Care Physician Offices in May 2022 and 49 responses were received. Below is a compilation of the results.

- What do you think are the three most important health problems in our Niagara County community? The top three responses were:
  1. Chronic Disease and Preventative Care Management
  2. Prevent Mental and Substance Use Disorders
  3. Healthy Eating and Food Security
- How would you rate the health of our community? The responses were:
  - 0% Very Healthy
  - 0% Somewhat Healthy
  - 51.02% Unhealthy
  - 36.73% Somewhat Healthy
  - 12.24% Very Unhealthy
- If you had the power, what would you do differently to improve the health of our community? The top three responses were:
  1. Need more community health education
  2. Increase mental health services
  3. Provide and improve access to local medical services

### Niagara County Focus Group Sessions

Five focus groups with a total of 61 participants were conducted in May 2022 at Niagara County locations including health care clinics, subsidized housing facilities and faith-based/community/senior centers and included the underserved. The focus groups were facilitated by the Niagara County Department of Health and hospital partners. The focus group questions were created by the Population Health Collaborative and used at all focus groups to maintain consistency. Focus Group participants reached consensus on the following responses to questions:

- What does a healthy community mean to you?
  - Plenty of accessible health care services
  - Good primary care physicians
  - Families with health insurance whose needs are being met
- What health problems are of biggest concern to you or your community?
  - Increase drug activity
  - Healthcare affordability
  - Transportation
- If you had the power, what would you do differently to improve the health of your community?
  - Mental Health programs- outpatient programs and support groups
  - Get people outside and kids outside instead of electronics
  - Affordable dentist for everyone
  - Safe places to exercises- in gyms and outdoor spaces.

### Niagara County Community Stakeholder Meeting

A Niagara County key stakeholder meeting was convened on September 12, 2022 at the Niagara County Public Safety Training Center in Lockport, NY. The work group partners including the Niagara County Department of Health, Eastern Niagara Hospital, Kaleida Health - DeGraff Medical Park, Catholic Health System - Mount St. Mary's Hospital and Niagara Falls Memorial Medical Center developed the session agenda and logistics in coordination with the Population Health Collaborative serving as facilitator. There were 49 attendees in total. In addition to the partners, participating organizations included AMS Nutrition Counseling, Mental Health Association of Niagara County, March of Dimes, Genesee Council on Alcoholism and Substance Abuse, Highmark Health, Fidelis Care, Mobile Safety Net Team of WNY, Horizon Health Services, Niagara County WIC, American Heart Association, Roswell Park Cancer Institute, Niagara Pride, Niagara County Office for the Aging, Niagara County Department of Mental Health and Substance Abuse Services, Niagara University, Niagara Organizing Alliance for Hope, Family Residency Program of Niagara Falls Memorial Medical Center, Lewiston Porter Central School District, Lockport City School District, Newfane Central School District, Niagara Wheatfield Central School District, WNY Integrated Care Collaborative and Heart, Love & Soul.

During this meeting, participants learned about Niagara County's Community Health Assessment/Community Health Improvement Plan (CHA-CHIP) and the hospital's Community Health Needs Assessment/Community Service Plan (CHNA-CSP) process and information and data was shared from the consumer health surveys, provider surveys and community focus group sessions implemented by the work group partners. The 2019-2024 NYS Prevention Agenda was discussed including Niagara County's plans to focus on the following Prevention Agenda priority areas: Prevent Chronic Disease and Promote Well-being and Prevent Mental and Substance Use Disorders. Breakout sessions were held, and each organization had the opportunity to share their experiences, organization services, and provide input for the development of focus areas and interventions activities as a part of the 2022-2024 Niagara County CHA-CHIP and the hospital CHNA-CSPs.

## Health Issues of Concern and NYS Prevention Agenda Priorities

The Erie County and Niagara County collaborative county work groups considered collected health data from internal and external sources and community input through surveys and focus groups including the underserved to determine health issues of concern for each of the counties.

The healthcare needs of Erie County and Niagara County are significant, and there were several identified areas of concern. The work groups considered the prevalence of the disease or healthcare need, the needs of disparate populations, the resources required to combat the disease including any existing programs and funding capabilities, the identification of evidence-based practices, impact of social determinants of health, and whether the programs could be evaluated for quantifiable measures and program sustainability.

**The top health issues of concern and the aligning NYS Prevention Agenda Priority Areas for Erie County were selected by the collaborative work group including Kaleida Health and are identified in the table below.**

Erie County and Kaleida Health	
Health Issues of Concern	2019-2024 NYS Prevention Agenda Priority Area
High rates of cardiovascular disease and high incidence of risk factors including high blood pressure, diabetes, obesity and smoking	Prevent Chronic Diseases
Increasing rise of mental health and substance use disorders, opioid addiction and fatal overdoses	Promote Well-Being and Prevent Mental and Substance Use Disorders
Poor outcomes in maternal and infant health, particularly among underserved populations	*Promote Healthy Women, Infants and Children

*\*While only two Priority Areas are required per county, based on community need, the Erie County Department of Health and Kaleida Health added this third Priority Area.*

**The top health issues of concern and the aligning NYS Prevention Agenda Priority Areas for Niagara County were selected by the collaborative work group including Kaleida Health and are identified in the table below.**

Niagara County and Kaleida Health	
Health Issues of Concern	2019-2024 NYS Prevention Agenda Priority Area
High rates of cardiovascular disease and high incidence of risk factors including high blood pressure, diabetes, obesity and smoking	Prevent Chronic Diseases
Increasing rise of mental health and substance use disorders, opioid addiction and fatal overdoses	Promote Well-Being and Prevent Mental and Substance Use Disorders

The low ranking of both Erie County and Niagara County among New York State (NYS) counties per the County Health Rankings and the chronic disease, substance use, and maternal, infant, and child health statistics identified in the Health Status of the Population section of this report and community input included in the Community Engagement Section of this report confirmed the need to prioritize these healthcare needs.

## Prevent Chronic Disease

As previously identified in the Health Status of the Population section of this report, cardiovascular disease is the number one cause of death in both Erie County and Niagara County. It also encompasses other areas of concern including high blood pressure, diabetes, obesity, lack of physical activity, smoking, access to care, poverty and many of the other social determinants of health. Additionally, the medically underserved and those of low income and minority populations are at greater risk of cardiovascular disease and its risk factors. See the Health Status of the Population and Community Engagement sections of this report for additional data.

The Erie County Department of Health, Niagara County Department of Health, area hospital and community partners are well positioned to address the region's high incidence of cardiovascular disease and its risk factors. They have been providing community-wide programs including nutrition education, cardiovascular and diabetes self-management programs, smoking cessation programs, obesity prevention programs, and programs to increase physical activity, among others.

In response to community need, cardiac and stroke care is a major service line at Kaleida Health hospitals, and more specifically at Buffalo General Medical Center/Gates Vascular Institute. The hospital serves as a regional specialty care facility for the care and treatment of patients suffering from cardiovascular disease, stroke and other neurological conditions. Both Millard Fillmore Suburban Hospital and DeGraff Medical Park serve as an urgent care gateway for patients requiring more specialized tertiary care at Buffalo General Medical Center/Gates Vascular Institute. John R. Oishei Children's Hospital provides pediatric care.

**See below cardiac and neuro discharge data for Kaleida Health hospitals.**

2021 Kaleida Health Inpatient Discharges – IP Cardiac and Neuro/Stroke (Kaleida Health, EPSI, FY2021)			
Kaleida Health Hospital	Cardiac	Neuro/Stroke	Combined
Buffalo General Medical Center/Gates Vascular Institute	5,187	2,903	8,090
Millard Fillmore Suburban Hospital	1,238	277	1,515
John R. Oishei Children's Hospital	50	188	238
<b>Totals</b>	<b>6,475</b>	<b>3,368</b>	<b>9,843</b>

Kaleida Health's cardiac and stroke services are utilized by all populations, including many who are medically underserved. 28.9% of 2018 total inpatient discharges, emergency department visits, outpatient visits at Buffalo General Medical Center/Gates Vascular Institute were reimbursed by Medicaid. The hospital is located in the City of Buffalo, a city with a 30.9% poverty rate and where 37.1% of the city's population is African American and 11.3% are Hispanic.<sup>150</sup>

Given community need and the resources, expertise and innovative programs of Buffalo General Medical Center/Gates Vascular Institute, John R. Oishei Children's Hospital, Millard Fillmore Suburban Hospital and DeGraff Medical Park, Kaleida Health selected Prevent Chronic Disease as a collaborative priority area with Erie County and Niagara County in this 2022-2024 CHNA-CSP.

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<sup>150</sup> US Census, 2018 Population Estimates

**Prevent Chronic Disease: 2022-2024 Focus Areas and Interventions – See the Work Plan on page 56 for more details.**

Erie County

- Healthy Eating and Food Security – Community Nutrition Education and Healthy Mobile Food Markets (Disparity – low income population), Worksite Nutrition and Wellness Program
- Preventive Care and Management – Cardiovascular Education and Screening Program in OB-GYN Centers (Disparity – female, Medicaid population), Chronic Disease Education Programs for the Community

Niagara County

- Healthy Eating and Food Security – Little Free Pantry (Disparity – food insecure population)
- Preventive Care and Management – Chronic Disease Education Programs for the Community

**Promote Well-Being and Prevent Mental and Substance Use Disorders – Opioid Use**

Opioid addiction often starts in individuals who are prescribed opioid pain medications or who take opioid medication prescribed for other people and may progress to using illegally manufactured drugs, such as heroin. Dangerous and powerful opioids, such as fentanyl, are increasingly being found on our streets, in addition to heroin. No single strategy alone can address this complex, multifaceted issue. The coordination of the many individual anti-opioid initiatives currently being undertaken throughout Western New York is critically needed. In 2015 and 2016, opioid use increased dramatically in NYS, and the counties of Erie and Niagara were largely impacted. Since that time, NYS and both Erie County and Niagara County put together task forces comprised of varied community stakeholders to combat the problem. Public education on the dangers of opioid use and addiction increased and Naloxone (Narcan) is used by EMS, police, and emergency department providers to immediately counteract the negative effects of opioid overdose. While the opioid burden rate decreased from 2016 to 2019, it has increased again in 2020 and 2021; and affects individuals of all races and backgrounds, and whether they reside in urban, rural, or suburban areas. Opioid addiction often starts in individuals who are prescribed opioid pain medications or who take opioid medication prescribed for other people and may progress to using illegally manufactured drugs, such as heroin. Dangerous and powerful opioids, such as fentanyl, are increasingly being found on our streets, in addition to heroin. No single strategy alone can address this complex, multifaceted issue. The coordination of the many individual anti-opioid initiatives currently being undertaken throughout Western New York is critically needed. Compounding the opioid addiction crisis among the general population is the increase in newborns with neonatal withdrawal syndrome and/or affected by maternal use of drugs of addiction.<sup>151</sup>

In 2016, the NYS Department of Health Buprenorphine Access Initiative began a program for practitioners to take specialized training and receive federal certification (“waiver”) and then prescribe buprenorphine to their patients in general practice settings to treat opioid dependence and addiction. By incorporating buprenorphine prescribing more broadly, individuals will have access to buprenorphine at a range of settings including primary care clinics, harm reduction programs, Federally Qualified Health Centers, EDs, obstetrician and gynecologists’ offices, housing services, jails and prisons, and other community-based organizations. Additionally, increased use of naloxone has helped to decrease the number of fatalities from overdoses and medication assisted and other treatment programs are expanding throughout the counties. Kaleida Health hospitals continue to support medication assisted treatment programs and

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<sup>151</sup> Erie County Department of Health, Niagara County Department of Health, 2019-2021 CHA-CHIP

substance abuse education and awareness programs to decrease opioid and other substance abuse in the WNY region.

Given community need and the resources, expertise and innovative programs of Buffalo General Medical Center/Gates Vascular Institute, John R. Oishei Children's Hospital, Millard Fillmore Suburban Hospital and DeGraff Medical Park, Kaleida Health selected Promote Well-Being and Prevent Mental and Substance Use Disorders as a collaborative priority area with Erie County and Niagara County in this 2022-2024 CHNA-CSP.

**Promote Well-Being and Prevent Mental and Substance Use Disorders– Opioid Use - Kaleida Health 2022-2024 Focus Areas and Interventions – See the Work Plan on page 56 for more details.**

Erie County and Niagara County

- Prevent Opioid and Other Substance Misuse and Deaths – MATTERS Buprenorphine and Treatment Referral Program, Availability and Access and Linkage to Opioid Overdose Reversal Medications, Medication and Syringe Drop Boxes in Hospital Emergency Departments and Prescription Drug Take-Back Days (Disparity – substance use population)

**Promote Healthy Women, Infants and Children**

Erie County has some of the highest rates in the state for infant and maternal mortality, premature birth, low birthweight babies, and teen pregnancy. Poverty, behavioral factors and many of the social determinants of health such as poor nutrition, smoking, obesity, substance abuse, mental health status, as well as teen pregnancy, and a lack of adequate prenatal care and education are all contributing factors for poor infant and child health outcomes. Statistical data, consumer surveys and focus group sessions all indicate a need to address the social determinants of health and access to culturally appropriate care leading to improved maternal, infant and child health. This is a health area of concern in Erie County and particularly in the high-risk zip codes in the City of Buffalo. See the Health Status of the Population and Community Engagement sections of this report for additional data.

A primary focus of Kaleida Health's John R. Oishei Children's Hospital (OCH) is maternal, infant and child health. Designated by New York State (NYS) as the only Regional Perinatal Center for Western New York (WNY), the hospital delivers the highest level of medical care available for critically ill infants and high-risk expectant mothers as well as for "normal" or low-risk deliveries. The hospital has the only Level IV Neonatal Intensive Care Unit in WNY staffed by pediatric subspecialists and surgeons supporting the healthcare needs of neonates and the only Level I Pediatric Trauma Unit serving the region, and has a Pediatric Intensive Care Unit. Approximately 65% of hospital patients are insured through Medicaid, and the hospital is home to Oishei Healthy Kids, a NYS Medicaid Health Home for Children.

Kaleida Health's Millard Fillmore Suburban Hospital (MFSH) offers a full range of maternity services to meet the needs of expecting parents and newborns that includes: prenatal testing, virtual education classes, a pregnancy and childbirth education and planning app, labor and delivery suites, mother baby unit, lactation (breastfeeding) assistance and post-partum support. The hospital serves the WNY region with a 10-bed Level II Neonatal Intensive Care Unit (NICU) specializing in the care of ill or premature newborn infants.

Given community need and the resources, expertise and innovative programs of OCH and MFSH, Kaleida Health selected Healthy Women, Infants and Children as a collaborative priority area with Erie County in this 2022-2024 CHNA-CSP.

**Promote Healthy Women, Infants and Children–2022-2024 Focus Areas and Interventions – See the Work Plan on page 56 for more details.**

Erie County

- Perinatal and Infant Health – Safe Sleep Initiative, Yomingo® Online Parent Education, Breastfeeding Promotion and Education Program

**Areas of Concern Not Addressed in this 2022-2024 CHNA-CSP**

Erie County and Niagara County Departments of Health and local hospitals provide a wide spectrum of healthcare services to address many of the healthcare needs identified in the this Community Health Needs Assessment-Community Service Plan. See below and refer to the We Are Kaleida Health and Care for the Underserved sections of this report for information on other areas that Kaleida Health is responding to community need.

Cancer – While cancer is the number two cause of death in Erie County and in Niagara County, it is not addressed in this Kaleida Health 2022-2024 CHNA-CSP and the counties’ 2022-2024 CHA-CHIP plans. The county work groups agreed to instead prioritize cardiovascular disease, the number one cause of death. The impact of cancer on the health of residents is well recognized and addressed with several ongoing cancer prevention, education, screening and treatment initiatives in place in the region. Both Erie County and Niagara County have dedicated Cancer Services Programs. Roswell Park Comprehensive Cancer Center, located in Buffalo, holds the National Cancer Institute designation as a comprehensive cancer center and has a proven multidisciplinary approach. John R. Oishei Children’s Hospital partners with Roswell on the Roswell Park Oishei Children’s Cancer and Blood Disorders Program for children and adolescents with cancer and hematologic disorders. Millard Fillmore Suburban Hospital has a Survivor Steps cancer rehabilitation program for cancer survivors. In 2018, Kaleida Health partnered with seven other healthcare providers to launch Great Lakes Health Cancer Care. This collaborative initiative is a comprehensive and integrated approach to cancer care for diagnosis and treatment, and includes research to find cures for cancer. In 2021, Kaleida Health engaged in cancer screening initiatives through collaborations with Great Lakes Cancer Care Collaborative and Western New York Urology. PSA colon cancer screenings were held in communities where NYS data identified zip codes with high levels of cancer and health disparities and included the following: Mount Moriah Baptist Church, Men's Program & Community Wellness Fun Day – Buffalo’ Mount Olive Baptist Church, East Delevan – Buffalo; Amherst Senior Center, NYS Senator Rath Family Health Fair – Amherst; Macedonia Baptist Church – Buffalo and WUFO 1080 AM/Power 96.5 FM – Buffalo. Additionally, in 2021, Kaleida Health’s Hertel-Elmwood Internal Medicine Clinic received grants from the New York State Department of Health and Health Research Inc. through the Comprehensive Cancer Control Program to provide a Colorectal Cancer Screening – Professional Education Program for staff, physicians, and residents; and a Lung Cancer Screening and Education Program targeting the clinic’s surrounding low income community. Community partners included UBMD, University of Buffalo School of Medicine and Biomedical Sciences, NYS Erie County Cancer Services, Great Lakes Imaging, American Cancer Society, and the American Lung Association.

Tobacco and Vaping – Tobacco cessation programs are provided throughout Erie County and Niagara County, and Kaleida Health inpatient and outpatient programs continue to provide patient education on the health benefits of not smoking and will continue to refer patients to these programs.

Environment – Air and water quality, food safety, built environments to promote physical health, sustainability, healthy home and school environments are addressed through federal, state and local governments as well as neighborhood and community-based organizations. Kaleida Health’s John R.

Oishei Children's Hospital partners with the WNY Asthma Coalition to improve air quality in the home to improve adult and childhood asthma rates. The hospital further addresses home safety through its Lead Poisoning Prevention program.

Injury Prevention – Kaleida Health works to reduce injuries among children through its Car Passenger Safety Program of the NYS Governor's Traffic Safety Committee. NYS grant funding through this program supports car seat safety checks for the community including education and awareness as well as the provision of free car seats for those who are of low income and in need. The program has been provided at John R. Oishei Children's Hospital since 2020 and a Car Seat Safety Check event was held in October 2022 at Millard Fillmore Suburban Hospital. Plans are also underway for a Bicycle Helmet Safety Check event at DeGraff Medical Park in spring 2023. These programs align with the NYS Prevention Agenda Priority Area to Promote a Healthy and Safe Environment.

Mental Health – Kaleida Health provides inpatient and outpatient behavioral health services for children through the Children's Psychiatry Center of John R. Oishei Children's Hospital. The Center also partners with other community-based providers to assure improved access to the most appropriate care for children with mental health conditions. Kaleida Health is a partner with Erie County Medical Center, home of the Regional Center of Excellence for Behavioral Health offering mental health and psychiatry services, as well as alcohol and drug addiction detoxification and rehab.

Communicable Disease - Both Erie County and Niagara County provide public awareness and education on communicable diseases including COVID-19, HIV, sexually transmitted diseases, Hepatitis-C virus as well as the importance of vaccines, and the improvement of infection control in healthcare facilities. All of these areas are priorities for Kaleida Health and its hospitals and clinics; and adhere to all New York State requirements for communicable diseases including infection control, and vaccines including pediatric immunization, COVID-19, and flu vaccines for patients and employees. Kaleida Health's Oishei Children's Hospital provides the following:

- Youth Link and Be PrEPared Program – supportive services to youth and young adults, ages 13-24, who identify as LGBTQ+, are living with or are at risk for HIV and STIs, are experiencing homelessness, sexual abuse, substance use and/or mental health related issues.
- The Family Planning Clinic and the Women's Health Centers address STIs, HIV and HCV.

All Kaleida Health hospitals assure and provide COVID-19 testing and vaccines for its employees and patients.



## Kaleida Health 2022-2024 Work Plan: Focus Areas, Goals, and Interventions

Kaleida Health, with hospitals located in Erie County and Niagara County, collaborated with the Erie County Department of Health, Niagara County Department of Health, and other hospital and community partners to select the NYS Prevention Agenda Priority Areas to address in each county's 2022-2024 Community Health Assessment-Community Health Improvement Plan (CHA-CHIP). Need data, consumer surveys, and focus group sessions, with input from the medically underserved, were all considered in the determination of each county's priorities. The New York State Department of Health asked each county to select two Priority Areas and one Disparity. Both Erie County and Niagara County selected Prevent Chronic Disease and Prevent Mental and Substance Use Disorders. Erie County added a third priority to Promote Healthy Women, Infants and Children. Disparities were selected by each entity based on selected interventions.

Kaleida Health work groups comprised of staff and other stakeholders were further enlisted to determine hospital focus areas, goals and interventions for each Priority Area for Erie County and Niagara County. Disparities were also selected as applicable. The selected interventions are included below in this Work Plan of the 2022-2024 Kaleida Health Community Health Needs Assessment-Community Service Plan (CHNA-CSP). Kaleida Health submitted its Work Plan to each of the county Departments of Health for inclusion in respective county 2022-2024 CHA-CHIP documents.

The 2021 Update to Kaleida Health's 2019-2021 CHNA-CSP available to the public and is located on the Kaleida Health website at <https://www.kaleidahealth.org/community/> under Publications and Resources. Through the 2022-2024 CHNA-CSP, Kaleida Health will focus on below NYS Prevention Agenda Focus Areas, Goals and Interventions. The selected interventions and applicable disparities for Erie County and Niagara County are described more fully in the Kaleida Health Work Plan section of this report.

### Prevent Chronic Disease

#### Erie County

##### 1. Erie County Intervention: Community Nutrition Education and Healthy Mobile Food Market on Buffalo General Medical Center (BGMC) Campus and at Millard Fillmore Suburban Hospital (MFSH)

**Focus Area:** Healthy Eating and Food Security

**Goals:** Increase skills and knowledge to support healthy food and beverage options; Increase food security

**Disparity Population:** low income, minorities at high risk for diabetes

**Objectives:**

- Nutrition education focusing on chronic disease including diabetes and pre-diabetes is provided to community members to increase skills and knowledge for healthy eating and decrease high rates of chronic disease among high-risk populations.
- A mobile food market with fresh produce to be set up twice per month at Buffalo General Medical Center (BGMC) Campus in Buffalo, NY to provide a nutritional source for food security for patients, visitors, employees and the residents of the hospital's surrounding underserved neighborhoods.
- A mobile food market with fresh produce to be set up two days per week at Millard Fillmore Suburban Hospital (MFSH) to provide a nutritional source for food security for patients, visitors, employees, and community residents.

**Description:**

- **Community Nutrition Education** - In-person and/or virtual Nutrition Education Sessions to be provided by Kaleida Health registered dietitians to underserved individuals at high risk for

diabetes and pre-diabetes at local churches, community centers, and employers. It is anticipated that the sessions will be held quarterly in 2023 and 2024. 2022 is a planning year.

- **Healthy Mobile Food Market at BGMC** - A mobile food market with fresh produce to be set up at an outdoor site at on the BGMC Campus from May through October in 2023 and 2024. Buffalo-based Urban Fruits and Veggies is the confirmed vendor and has tentatively agreed to the 2<sup>nd</sup> and 4<sup>th</sup> Thursday from 10:30 a.m. – 2:30 p.m. at Ellicott and High Streets at BGMC and in close proximity to John R. Oishei Children's Hospital. Fresh fruits and vegetables at low prices will be available and promoted to residents of the hospitals' low-income neighborhoods as well as patients, visitors and employees. Nutrition education information to be distributed at the market. It will be a source for food security and a nutritional diet for the underserved.
- **Healthy Mobile Food Market at MFSH** - A mobile food market with fresh produce and other goods was set up be set up at an outdoor site at on the MFSH Campus in June-November 2022 and will be set up during the same timeframe in 2023 and 2024. Coulter Farms (<http://coulterfarmsllc.com/>) is the confirmed vendor and has tentatively agreed to the Tuesdays and Fridays each week from 11 a.m. to 4 p.m. Fresh fruits and vegetables, along with other food items will be available and promoted to patients, visitors, employees and the surrounding community. Nutrition education information will be distributed at the market.

**Evidence-based Sources:**

- Community Strategies and measurements to prevent Obesity in the United States; The Community Guide – Obesity Work site programs; US.Gov Taking action on social determinates of health in clinical practice, CMAJ- JAMC.
- NYSDOH BRFSS Brief No. 1810, Perceived Food Security in Adults, 2016

**Outcomes:**

- 2022 – Program planning and development of Community Nutrition Education and Healthy Mobile Food Market at BGMC. Program Implementation of Healthy Mobile Food Market at MFSH.
- 2023, 2024 – Program implementation with four in-person or virtual nutrition education sessions to be provided annually, Mobile Food Market on site twice per month at BGMC Campus from May-October and two days per week at MFSH Campus from June-November. Nutrition education flyers to be provided to customers

**Person(s) Responsible:**

- Clinical Dietician – BGMC Programs
- Manager of Outreach – BGMC Programs
- Manager Marketing Northtowns – MFSH Program

**Partner(s):**

- Community Organizations – to host the nutrition education sessions
- Healthy Mobile Food Market Vendor at BGMC – Urban Fruits and Veggies
- Healthy Mobile Food Market Vendor at MFSH – Coulter Farms

**2. Erie County Intervention: Kaleida Health Worksite Nutrition and Wellness Programs**

**Focus Areas:** Healthy Eating and Food Security, Physical Activity

**Goals:** Increase skills and knowledge to support healthy food and beverage options; Increase food security; and promote physical activity among Kaleida Health employees.

**Disparity Population:** open to all Kaleida Health employees

**Objectives:**

- Nutrition education focusing on chronic disease including diabetes and pre-diabetes to be offered to Kaleida Health employees to increase skills and knowledge for healthy eating and decrease high rates of chronic disease among high-risk populations.
- A Farm to Hospital collaboration to bring more locally sourced, healthy food options to employees, patients, and visitors of the Buffalo General Medical Center campus.
- Through a partnership with the Buffalo Niagara Medical Campus, exercise programs are made available to employees of the Buffalo General Medical Center campus to improve employee wellness through physical activity and a healthy lifestyle.

**Description:**

- **Nutrition Tune-Up Days** - Kaleida Health dieticians to provide in-person or virtual Nutrition Tune Up Days in which employees sign up to receive a 20-minute one-on-one nutrition education session with a registered dietician. Anticipated locations include: John R. Oishei Children's Hospital, Millard Fillmore Suburban Hospital (MFSH), Hertel Elmwood Primary Care Clinic, Women's Health Center and Larkin administrative offices. Buffalo General Medical Center employees have access to an on-site dietician for nutrition consultation upon request.
- **Farm to Hospital Program** - In 2020, a partnership between Kaleida Health and its food vendor, Metz Culinary Management, and the Buffalo Niagara Medical Campus (BNMC) was initiated to help bring more locally grown and sourced produce, meats and other menu items to the cafeterias at Buffalo General Medical Center, John R. Oishei Children's Hospital, and HighPointe on Michigan, all located on the BNMC.

In 2020 and 2021, the BNMC Farm to Hospital team has been providing Kaleida Health employees, patients and visitors with information about healthy nutrition and featuring local produce and meats, as well as introducing the farmers behind the products. The Metz chefs and general managers visited local farms to learn new agricultural methods and sustainable practices. Through the Metz Farm to Hospital partnership, Kaleida Health provides emails via Campus E-News to employees of participating facilities, promoting facts on the benefits of local fruit and vegetables, as they are fresher and safer than many store-bought options. A specific fruit or vegetable and a local farm is a feature of each promotion.

Planning for the Kaleida Health Farm to Hospital program began in 2017 in partnership with the BNMC. The program provides an opportunity to work together with other hospitals and organizations of the BNMC to leverage available resources for the benefit of all campus members including employees, patients and visitors. The goal is to continue to provide the Farm to Hospital program and explore new ways to promote health and wellness in the community through innovation and partnerships to address chronic disease risk factors and to improve population health among Western New York residents.

- **Wellness Program** - Kaleida Health to promote employee participation in campus wellness events as sponsored by the Buffalo Niagara Medical Campus (BNMC). Many of the events have been postponed due to the COVID Pandemic and may be re-scheduled at a future time. In 2021, Walks on Wednesday resumed and continued in 2022 and is anticipated to continue in 2023, 2024.

**Evidence-based Sources:**

- Community Strategies and measurements to prevent Obesity in the United States; The Community Guide – Obesity Work site programs; US.Gov Taking action on social determinates of health in clinical practice, CMAJ- JAMC
- Healthcare without Harm, <https://noharm-uscanada.org/>
- Practice Greenhealth, <https://practicegreenhealth.org/>

**Outcomes:**

- 2022 – Program planning of Nutrition Tune-Up Days and continued implementation of nutritional counseling on a requested basis for Buffalo General Medical Center employees. Continue implementation of the Farm to Hospital Program and Walks on Wednesday.
- 2023 – Implementation with four in-person or virtual Nutrition Tune Up Days to be provided to Kaleida Health employees. Buffalo General Medical Center employees will continue to have access to an on-site dietician for nutrition consultation as requested. Continuation of the Farm to Hospital Program and Walks on Wednesday
- 2024 – Implementation with four in-person or virtual Nutrition Tune Up Days to be provided to Kaleida Health employees. Buffalo General Medical Center employees will continue to have access to an on-site dietician for nutrition consultation as requested. Continuation of the Farm to Hospital Program and Walks on Wednesday.

**Person(s) Responsible:**

- Clinical Dietician
- Senior Marketing Associates – promotion
- Director of Ambulatory Services for BGMC

**Partner(s):**

- Metz Culinary Management
- Buffalo Niagara Medical Campus – Farm to Hospital Program partner and sponsor of Walks on Wednesday

**3. Erie County Intervention: Cardiovascular Education & Screening Program in OB-GYN Centers of John R. Oishei Children's Hospital (OCH)****Focus Area:** Preventive Care and Management

**Goal:** Increase early detection of cardiovascular disease, diabetes, pre-diabetes and obesity

**Disparity Population:** women including low income, medically underserved – 81.5% of clinic patients are insured by Medicaid

**Objectives:**

- Using evidence-based cardiovascular self-assessment and clinical assessment tools, OB-GYN providers screen women for cardiovascular disease and its risk factors at their annual gynecological exam at the Kensington and Niagara Street OB-GYN Centers of OCH. Education and primary care referrals are also provided.
- Increase cardiovascular screening and risk factor identification, education and referral for this female and primarily low-income population will lead to improved rates of cardiovascular disease in the community.

**Description:**

- Patients presenting for their annual gynecological exam at the OCH Kensington and Niagara Street OB-GYN Centers will complete an evidence-based cardiovascular risk factor self-assessment and then provide the assessment to their provider in the exam room. Self-assessment updated in 2019 and approved by clinic providers.
- Providers review the patient's self-assessment, and based on evidence-based criteria, conduct a clinical assessment to determine if the patient is at risk for cardiovascular disease. The provider documents risk and advisement data in the EMR for tracking and outcome purposes.
- Evidence-based educational materials on cardiovascular disease and its risk factors are provided to patients in English and Spanish including (1) "The 2020 Impact Goal Including Life's Simple 7" and (2) Change Your Salty Ways in Only 21 Days"(American Heart Association).
- Primary care physician (PCP) referral information is provided as needed.

**Evidence-based Sources:**

- National Heart, Lung and Blood Institute U.S. Department of Health and Human Services (December 1, 2017). Who is at Risk for Heart Disease as Retrieved from <https://www.nhlbi.nih.gov/health/health-topics/topics/hdw/atrisk>
- American Heart Association

**Outcomes:**

- 2022 – Program planning to re-start the program in 2023 after experiencing implementation challenges due to COVID-19.
- 2023, 2024 – Program Implementation with an annual goal to provide cardiovascular screening and risk factor education to 60% of patients presenting at the OB-GYN Centers for their annual gynecological exam.

**Person(s) Responsible:**

- Clinic Manager

**Partners:**

- OB GYN Providers

## **Prevent Chronic Disease - Niagara County**

### **1. Niagara County Intervention: Little Free Pantry at DeGraff Medical Park**

**Focus Area:** Healthy Eating and Food Security

**Goal:** Increase food security

**Disparity Population:** low income and food insecure

**Objectives:**

- The Little Free Pantry program will provide community access to a free source of food at a self-contained pantry to increase food security among underserved populations.

**Description:**

- In 2019, a partnership developed between DeGraff Medical Park and “The Little Free Pantry” of North Tonawanda. The Little Free Pantry is a 4’ x 4’ standing display crate to be located outside on the campus of DeGraff Medical Park that will serve as a food pantry for those who are food insecure. Hospital staff and volunteers will monitor the pantry, keep the pantry filled and maintained, and members of the community are welcome to access the food in the pantry 24/7 as needed to meet their needs. Community members may also help to stock the pantry. Take-home nutrition education materials will be made available at the pantry. Evidence-based source: The Little Free Pantry is an international initiative that utilizes a familiar, compelling concept to pique local interest in and action against local food insecurity - <http://www.littlefreepantry.org/>. North Tonawanda has set up Little Food Pantries through the community with more information accessed on Facebook - [https://www.facebook.com/pg/TLFP.NT/about/?ref=page\\_internal](https://www.facebook.com/pg/TLFP.NT/about/?ref=page_internal)

**Evidence-based Sources:**

- NYSDOH BRFS Brief No. 1810, Perceived Food Security in Adults, 2016

**Outcomes:**

- 2022, 2023, 2024 - “Little Free Pantry” is operational and staff, volunteers, and community members stock the pantry with donated food The underserved community of North Tonawanda have increased food security.

**Person Responsible:**

- ED Manager
- Volunteers

**Partner:**

- Little Free Pantry of North Tonawanda – provide program information and support through its social media pages

## **Prevent Chronic Disease Erie County and Niagara County**

### **1. Erie County and Niagara County Intervention: Virtual Chronic Disease Education Programs**

**Focus Area:** Preventive Care and Management

**Goals:** Increase early detection of cardiovascular disease, diabetes, pre-diabetes, obesity and other chronic disease

**Disparity Population:** open to all

**Objectives:**

- Through community outreach, evidence-based chronic disease education programs are provided to the community to increase knowledge of chronic diseases and risk factors, and thereby decrease chronic disease prevalence.

**Description:**

- Provide community outreach and conduct evidence-based chronic disease education through the “Healthy U” program to increase knowledge of chronic diseases and risk factors. Due to COVID-19, the education programs are virtual via Facebook Live. Providers and clinicians are presenters. Participating hospitals include Buffalo General Medical Center/Gates Vascular Institute, John R. Oishei Children’s Hospital and Millard Fillmore Suburban Hospital in Erie County; and DeGraff Medical Park in Niagara County. The programs are promoted both internally throughout Kaleida Health and externally to the community. The number of programs, viewers per program, and the number of individuals who engaged with the speaker or responded to the presentation are tracked.
- The “Medically Speaking” program is an educational interview series conducted with physicians and clinicians across the Kaleida Health organization, including its affiliates and partnering organizations on important topics in health care. The interviews are aired on Facebook and featured on the Kaleida Health website at [www.kaleidahealth.org/medically-speaking](http://www.kaleidahealth.org/medically-speaking). The programs are promoted both internally throughout Kaleida Health and externally to the community. The number of presentations, the number of viewers per presentation, and the number of individuals who engaged with the speaker or responded to the presentation are tracked.
- The “Medical Minute” program features one-minute videos on health related topics and are targeted to the community including the underserved. The program airs every Monday on WIVB-TV, Channel 4 and on Kaleida Health social media channels. The number of programs and the number of viewers per program are tracked.

**Outcomes:**

- 2022, 2023, 2024
  - Healthy U – 8 to 10 per year – VIRTUAL ONLY on Facebook (social media) – goals is one per month but sometimes they are canceled due to a speaker not able to make it or a very minimal number of participants.
  - Medically Speaking - 15-20 videos per year – aired on social media – Facebook
  - Medical Minute – 52 weekly airings on WIVB TV and then posted on KH Social Media (Facebook)

**2022 Progress:**

- Healthy U - The total reach of the six live seminars through December 31, 2022 is 9,348, with 2,903 views and 120 individuals engaged with the speaker or responded to the presentation through September 30. Three classes were postponed or cancelled due to scheduling conflicts with the physician. Topics included: An Ounce of Prevention-Cervical Cancer, Stop the Clot, Perinatal Mood Disorders during Pregnancy & Postpartum, Stroke Treatment in the Extended Time Window, Medical Therapy Management and Physical Rehabilitation & Recovery
- Medically Speaking – 12 videos aired reaching 18,173 individuals and 462 of those individuals engaged with the speaker or responded to the presentation. Topics included: COVID surgery postponements, cardiac month topic-A Fib, colorectal cancer, gender affirming care, how the impact of technology has effected stroke and stroke treatment over the years, Connect Life – blood shortage and healthcare in the Southern Tier.
- Medical Minute - 39 videos were released weekly from January 3-September 26 reaching 37,415 people with 11, 902 views. Topics included: lung Cancer, cervical Cancer, stroke care, colorectal cancer, testicular cancer, thyroid disease, chronic kidney disease, detecting DVT's, Breast cancer awareness, prostate cancer, ovarian cancer, pulmonary embolism, and child abuse.

**Evidence-based source:**

- CDC (Centers for Disease Control and Prevention, <https://www.cdc.gov/chronicdisease/about/prevent/index.htm>)

**Person(s) Responsible:**

- Senior marketing associates – program planning, promotion

**Partner(s):**

- Health care professionals – serve as program presenters

## **Prevent Mental and Substance Use Disorders – Opiate Use Erie County and Niagara County**

### **1. Erie County and Niagara County Intervention: Buprenorphine and Treatment Referral Program for Patients with Opiate Use Disorders at Kaleida Health Emergency Departments**

**Focus Area:** Prevent mental and other substance use disorders

**Goal:** Prevent opioid and other substance misuse and deaths

**Disparity Population:** substance users

**Objective:**

- Increase availability of/access and linkages to medication-assisted treatment (MAT) including Buprenorphine with opioid use disorders in Kaleida Health emergency departments to decrease the incidence of poor outcomes and death due to opioid addiction.

**Description:**

- Kaleida Health emergency departments of Buffalo General Medical Center/Gates Vascular Institute and Millard Fillmore Suburban Hospital in Erie County and DeGraff Medical Park in Niagara County to participate in the MATTERS program, a Hospital-Initiated Buprenorphine and Treatment Referral Program. MATTERS is a program developed by Joshua Lynch, MD, and others in the Department of Emergency Medicine at the UB Jacobs School of Medicine and Biomedical Science. Dr. Lynch is a UBMD physician affiliated with Kaleida Health. The program is open to all hospitals throughout Western New York, and other partners include John R. Oishei Foundation, Erie County and NYS Departments of Health; and continues to expand throughout New York State (NYS). The program's purpose is to increase access to the buprenorphine-based opiate use disorder treatment and to immediately refer patients to treatment. An online, real-time referral program directly in the emergency department or through Kaleida Health's virtual emergency department connects patients with a network of 20 Western New York treatment agencies. There

are currently 120 weekly treatment appointments available for Western New York. Statewide, the MATTERS program partners with more than 180 treatment organizations with approximately 2,000 appointment slots available across NYS.

- Moving forward, the referral platform will undergo significant improvements and upgrades in 2023 and include expansion of its capabilities to refer patients with other substance use disorders and mental health conditions. Plans are also underway to implement a robust clinic follow-up dashboard to determine how many patients keep their first clinic appointment after referral for opioid use disorder treatment.

**Evidence-based Source:**

- Larochelle, M. R., et al. (2018). "Medication for Opioid Use Disorder after Nonfatal Opioid Overdose and Association with Mortality: A Cohort Study." *Ann Intern Med*, 169(3): 137-145.

**Outcomes:**

- 2022, 2023, 2024 – Program implementation with annual number of referrals tracked for each hospital. In 2021, 18 referrals were made.

**Person(s) Responsible:**

- MATTERS physician liaison
- ED Managers

**Partner:**

- MATTERS program– to provide referral data

## **2. Erie County and Niagara County Intervention: Availability and Access to Opioid Overdose Reversal Medications at Kaleida Health Emergency Departments**

**Focus Area:** Prevent mental and other substance use disorders

**Goal:** Prevent opioid and other substance misuse and deaths

**Disparity Population:** substance users

**Objective:**

- Provide for availability, access, and linkages to overdose reversal medications including naloxone to decrease poor outcomes and death due to opioid addiction.

**Description:**

- Kaleida Health emergency departments at Buffalo General Medical Center and Millard Fillmore Suburban Hospital in Erie County and DeGraff Medical Park in Niagara County continue to provide patient access to Naloxone, an overdose reversal medication. Kaleida Health emergency department staff are trained in dispensing of Naloxone Spray Kits. In 2021, fentanyl test strips were added to the kits to decrease accidental overdose due to fentanyl-laced products.

**Evidence-based Source:**

- Oregon Health and Science University. Best Practices in Naloxone Treatment Programs for Opioid Overdose.

**Outcomes:**

- 2022, 2023, 2024 – Program implementation with annual number of Naloxone Kits tracked for each hospital through the Kaleida Health pharmacy. In 2021, 27 kits were distributed.

**Person(s) Responsible:**

- Pharmacy Director

**Partner:**

- Erie County Department of Health – Erie County Opiate Epidemic Task Force – provide partnership and support



### **3. Erie County and Niagara County Intervention: Medication and Syringe Drop Boxes and Prescription Drug Take Back Days at Kaleida Health Emergency Departments**

**Focus Area:** Prevent mental and other substance use disorders

**Goal:** Prevent opioid and other substance misuse and deaths

**Disparity Population:** open to all

**Objectives:**

- Provide for permanent, safe disposal sites for prescription drugs and syringes and participation in organized prescription drug take-back days to decrease the availability of these drugs and to decrease the rate of substance use and addiction in the community

**Description:**

- Medication and Syringe Drop Boxes are provided at the emergency departments of Buffalo General Medical Center/Gates Vascular Institute, John R. Oishei Children's Hospital, and Millard Fillmore Suburban Hospital in Erie County and DeGraff Medical Park in Niagara County. Erie County and Niagara County Sheriff's Offices pick up and transport contents of drop boxes on a regular basis to Covanta Energy for incineration.
- Prescription Drug Take Back Days are held at Millard Fillmore Suburban Hospital and DeGraff Medical Park. The National Prescription Drug Take Back Day program aims to provide a safe, convenient, and responsible means of disposing of prescription drugs, while also educating the general public about the potential for abuse of medications. For more information: [https://www.deadiversion.usdoj.gov/drug\\_disposal/takeback/](https://www.deadiversion.usdoj.gov/drug_disposal/takeback/)

**Evidence-based sources:**

- FDA, Safe Disposal of Medicines, <https://www.fda.gov/drugs/safe-disposal-medicines/disposal-unused-medicines-what-you-should-know> ; US Department of Justice, [Drug Disposal Information \(usdoj.gov\)](https://www.usdoj.gov/drugdisposal/)

**Outcomes:**

- 2022, 2023, 2024 - Medication and syringe drop boxes continue to be placed on-site in Kaleida Health emergency departments. Two Prescription Drug Take Back Days to be held annually at Millard Fillmore Suburban Hospital in Erie County and two to be held annually at DeGraff Medical Park in Niagara County. In 2022, the Prescription Drug Take Back Days were held April 30, 2022 and October 29, 2022 at each site.

**Person(s) Responsible:**

- Pharmacy Director

**Partner(s):**

- Erie County Department of Health – Erie County Opiate Epidemic Task Force, Erie County Sheriff's Office, Niagara County Sheriff's Office, [www.thepointnyny.org](http://www.thepointnyny.org) for location information - Medication and Syringe Drop Boxes
- DEA (Drug Enforcement Administration) National Prescription Drug Take Back Days – program sponsor

## **Promote Healthy Women, Infants, and Children Erie County (only)**

### **1. Erie County Intervention: Safe Sleep Initiative at John R. Oishei Children's Hospital (OCH) and Millard Fillmore Suburban Hospital (MFSH)**

**Focus Area:** Perinatal and infant health

**Goal:** Reduce infant mortality and morbidity

**Disparity Population:** open to all including the underserved as 63.8% of patients at OCH and 14.1% of patients at MFSH are insured through Medicaid

**Objective:**

- Using evidence-based safe sleep education and quality improvement strategies, OCH and MFSH will educate parents/caregivers of newborns on the practices of safe sleep to reduce the incidence of SUID (Sudden Unexpected Infant Death), thereby decreasing infant mortality rates.

**Description:**

- Sudden Unexpected Infant Deaths or SUID is accidental suffocation and strangulation in bed, and sleep-related deaths of an unknown cause; it is the leading cause of infant death after the first month of life and one of the leading causes of death overall. The American Academy of Pediatrics have long recommended that infants be placed to sleep on their backs, and in 2011 recommendations were expanded to address other risk factors by promoting safe sleep environments, breastfeeding and avoiding smoke exposure. The 2017-2019 infant mortality rate per 1,000 live births (<1 year) for Erie County while the NYS rate is 4.4. (2017-2019, NYS Vital Statistics as of October 2021).
- In September 2022, OCH implemented evidence-based practice/strategies and achieved Gold Safe Sleep Certification through the Cribs for Kids' National Safe Sleep Hospital Certification program. MFSH will be modeling similar practices/strategies to achieve a Silver or Gold certification by 2023. OCH through its WNY Regional Perinatal Center (RPC) will continue regional collaboration with all birthing hospitals to achieve Cribs for Kids' certifications. 5 of the 11 affiliates in the WNY region now have certifications.
- This nationally recognized certification program recognizes hospitals and hospital systems for their commitment to infant safe sleep to reduce the risk of Sudden Unexpected Infant Death (SUID), Accidental Suffocation and Strangulation in Bed (ASSB), SIDS, and unsafe sleep injuries. The program confers a bronze, silver, and gold designation to hospitals that model and teach infant safe sleep according to current American Academy of Pediatrics (AAP) best practices outlined in the Cribs for Kids' Certification Manual and Hospital Certification Toolkit. Program rigor is developed according to the most current AAP evidence-based policies and consultation with medical experts from the AAP Safe Sleep Task Force. See <https://cribsforkids.org/hospitalcertification/> for more details on certification standards.
- Through the Safe Sleep Initiative, OCH and MFSH will provide safe sleep education for parents/caregivers and the HALO® Sleep Sack® for all newborns to take home to replace the use of loose bedding, a risk factor for SUID. The Safe Sleep Initiative and sleep sacks are supported through Tops Friendly Markets and the Children's Hospital of Buffalo Foundation. The sleep sack is a wearable blanket that is intended to eliminate the likelihood that a baby can get entangled with clothing and loose bedding during sleep. It is sleeveless and can be worn over pajamas or a bodysuit to take the place of loose blankets. Bedding can accidentally cover a baby's face and interfere with breathing. OCH is trialing a new program with HALO that will allow the use of sleep sacks while in the hospital and exchange for a new one upon discharge. This will promote/reinforce education and model best practice with families while they are in the hospital. The goal is to spread this out to all the units that house/admit infants 12 months or less. The SUID education and the distribution of sleep sacks will provide a safe sleep environment for infants and help to alleviate the risk of SUID.
- Through a partnership with the Child Advocacy Center and the Safe Sleep Ambassador, per an assessment, OCH families requiring a safe sleep environment for their newborn are provided a safe sleep pack and play upon discharge.

- Safe sleep educational materials, including the NYS Department of Health brochure, “Follow the ABCs of Safe Sleep,” will continue to be included in all new mom packets. An educational video will be shown to all new moms via TVR in patient rooms at OCH and via pCare TV.
- Safe sleep is a part of the Quality Improvement (QI) initiatives of OCH and MFSH and includes a safe sleep policy and a program of staff awareness and education. The QI program includes monthly audits on Safe Sleep practices throughout the hospital and building in a prevention bundle for Quality/Safety. The EMR also includes staff reminders to mention safe sleep when entering Mother-Baby rooms. OCH and MFSH staff are provided standardized safe sleep education and training; and how to model best practice for safe sleep as required annually as facilitated through the Kaleida Health Talent Management System and upon-hire during the orientation process.
- OCH and MFSH websites provide updated safe sleep education at: <https://www.ochbuffalo.org/care-treatment/Maternity-Services/Safe-Sleep> and at <https://www.kaleidahealth.org/maternity/> under Tips Tools and Guides, Safe Sleep for Baby.
- Additionally, all parents of newborns are educated on the dangers of shaking a baby to reduce the incidence of Shaken Baby Syndrome, a preventable cause of infant injury and death.

**Evidence-based sources:**

- New York State Perinatal Quality Collaborative (NYSPQC), New York State Department of Health [https://www.albany.edu/sph/cphce/neo\\_public/safe\\_sleep.shtml](https://www.albany.edu/sph/cphce/neo_public/safe_sleep.shtml)  
[https://www.albany.edu/sph/cphce/neo\\_public/NYSDOH-MCH-Information-for-Action-Safe-Infant-Sleep.pdf](https://www.albany.edu/sph/cphce/neo_public/NYSDOH-MCH-Information-for-Action-Safe-Infant-Sleep.pdf)

**Outcomes:**

- 2022 – Continuation of ongoing Safe Sleep Initiative that kicked off in 2019 and planning for new quality, education and certification initiatives to be implemented in 2022 and 2023. OCH achieved Gold Safe Sleep Certification from Cribs for Kids’ National Safe Sleep Hospital Certification program \*All delivery parents will receive safe sleep education and a sleep sack to take home for their newborn.
- 2023, 2024 – OCH and MFSH will conduct an expanded Safe Sleep Initiative including enhanced education and awareness, and will work to establish a Safe Sleep Initiative that meets Quality Improvement Goals. MFSH will work to achieve Silver or Gold Safe Sleep Certification through the Cribs for Kids National Safe Sleep Hospital Certification Program. Both OCH and MFSH will continue work and community engagement around safe sleep and provide annual reports to Cribs for Kids for a five year period. \*All delivery parents will receive safe sleep education and a sleep sack to take home for their newborn.
- \*At OCH, 3,621 newborns were delivered at the hospital in 2021 and at MFSH, 2,874 newborns were delivered annually at the hospital in 2021.

**Person(s) Responsible:**

- OCH – Chief Nursing and Clinical Operations Officer
- OCH Safe Sleep Committee that includes education and nursing leadership, pediatric residents, MDs and ambulatory nursing leadership
- MFSH – Director Women’s Services

**Partner(s):**

- Cribs for Kids
- Children’s Hospital of Buffalo Foundation
- Tops Friendly Markets
- Child Advocacy Center and their Safe Sleep Ambassador

- Safe sleep education is also a priority of the Erie County Department of Health, NYS Department of Health and the NYS Perinatal Quality Collaborative – provide free materials on Infant Safe Sleep

## **2. Erie County Intervention: Online Parent Education Program through Millard Fillmore Suburban Hospital (MFSH)**

**Focus Area:** Perinatal and infant health

**Goal:** Reduce infant mortality and morbidity

**Disparity Population:** open to all

**Objectives:**

Increase the knowledge of pregnant women/parents on prenatal, perinatal, infant and child care through the use of the YoMingo® app as offered by MFSH to provide childbirth education to improve maternal and infant health outcomes.

**Description:**

- MFSH is offering anytime, anywhere parent education (at no charge) to new moms/parents through the online YoMingo® program. It is available on any device with an internet connection and also as a mobile app called YoMingo®. YoMingo® provides access to evidence-based information on prenatal care, labor and birth, postpartum, breastfeeding, and newborn care including detailed videos, kick counter, contraction timer, person journal, feeding log, immunization log and other tools.
- MFSH provides YoMingo® informational flyers to physician offices to promote the availability of the program. A QR code was added to the flyer in 2022 for increased patient access.

**Evidence-based Source:** [www.myyomingo.com](http://www.myyomingo.com)

**Outcomes:**

- 2022, 2023, 2024 – Continued offering of YoMingo® to the community. An estimated 400 individuals will access the YoMingo® childbirth education app per year. YoMingo® tracks the number of hits for MFSH. It is also anticipated that the promotional flyers will be distributed to 150 physician offices.

**Person Responsible:**

- Director Women’s Services

**Partner:**

- Physicians – will promote YoMingo® to patients

## **3. Erie County Intervention: Breastfeeding Promotion and Education Program at John R. Oishei Children’s Hospital (OCH) and Millard Fillmore Suburban Hospital (MFSH)**

**Focus Area:** Perinatal and infant health

**Goal:** Increase breastfeeding

**Disparity Population:** Medicaid/underserved - 63.8% of patients at OCH and 14.1% of patients at MFSH are insured through Medicaid

**Objectives:**

- Implement evidence-based breastfeeding promotion and education initiatives at OCH and MFSH to increase “initiation” and “exclusive” breastfeeding rates to improve the health of both mothers and children.
- The 2011 US Surgeon General’s Call to Action to Support Breastfeeding outlines the following health benefits of breastfeeding:
  - Breastfeeding protects babies from infections and illnesses that include diarrhea, ear infections and pneumonia.

- Breastfed babies are less likely to develop asthma.
- Children who are breastfed for six months are less likely to become obese.
- Breastfeeding also reduces the risk of Sudden Unexpected Infant Death (SUID).
- Mothers who breastfeed have a decreased risk of breast and ovarian cancers.
- Breastfeeding also has economic advantages. Breastfeeding reduces or eliminates the cost of formula for families; and because breastfed babies and their mothers tend to be healthier, savings are further realized in the overall cost of health care.

**Description:**

- OCH and MFSH labor and delivery, neonatal intensive care unit (NICU), nursery, and postpartum units will continue to provide its evidence-based breastfeeding promotion and education programs to increase “initiation” and “exclusive” breastfeeding rates at each hospital. Both OCH and MFSH follow the guidelines of the World Health Organization (1998) – Evidence for the Ten Steps to Successful Breastfeeding (<https://www.babyfriendlyusa.org/for-facilities/practice-guidelines/10-steps-and-international-code/>).
- OCH and MFSH will continue to provide Baby-Friendly USA practices included in the Breastfeeding Bill of Rights for inpatients, foster skin-to-skin contact within the golden hour, offer rooming in, limit access to formula, and have trained lactation support to foster successful breastfeeding. OCH achieved Baby Friendly® USA designation in December 2019 (<https://www.babyfriendlyusa.org/>).
- OCH and MFSH will continue its policy to provide formula only upon request, and to not provide free formula or giveaways from formula vendors. Breast milk warmers and individualized breast milk refrigerators are provided in patient rooms in the NICU at both hospitals.
- OCH and MFSH will increase collaboration and the sharing of resources with regular meetings of key staff and leadership. Their role is to evaluate, identify, implement and monitor breastfeeding initiatives and to track data to assure improvements in breastfeeding rates.
- Evidenced-based patient education materials in English and Spanish will continue to be provided for labor and delivery patients at OCH and MFSH, and for OB patients at OCH’s OB-GYN Centers.
- Clinical educators at OCH and MFSH will continue to provide breastfeeding education to staff and offer an online provider education module on breastfeeding practices to providers.
- OCH will continue to operate its hospital-based Baby Café which was established in 2019 and operated in an online only capacity since 2020. In 2022, all classes are offered online and in person at OCH. Lactation consultants offer breastfeeding support, education, and troubleshooting for parents who have questions or need further assistance after discharge.
- <http://www.babycafeusa.org/>. In 2022, MFSH set up a Lactation Room for employees and visitors.
- OCH has identified the need for lactation support to parents whose infant is admitted to NICU immediately after birth. By the end of 2022, the lactation consultant will increase the number of NICU parents (by 5%) who starting breast pumping within 2 hours after delivery of infant. OCH understands the importance of breastfeeding support for the patient whose infant is in NICU. By the end of 2024, there will be a private space referred to as the “Breastfeeding Lounge” where the breastfeeding client can receive additional support and education from the lactation nurse as well as other breastfeeding parents.
- OCH will support breastfeeding patients by performing follow up phone calls after discharge and offering lactation assistance. While in the hospital, breastfeeding may not present any challenges but once they arrive home issues arise. By performing follow up calls to ALL discharge patients, the goal is to identify and address these concerns while offering the patient with breastfeeding help (such as offering them to come to Baby Café).
- OCH will continue to identify patients who are breastfeeding versus bottle feeding by enhancing the hospital’s tracking technique via charge nurse handoff report.

- OCH is working to increase its number of lactation consultants by the end of 2025 by 25-30% to increase lactation support on Labor and Delivery during the Golden Hour. The Golden Hour is the first hour after birth when a mother has uninterrupted skin-to-skin contact with her newborn. It helps regulate the baby's temperature, helps control their respiration and lower the risk of low blood sugar. With an increase in the number of lactation consultants to promote/assist during the golden hour, the initiation rate for breastfeeding will improve.
- Continue to identify and refer at risk moms at OCH for home case management and breastfeeding support through the Visiting Nursing Association of WNY (VNA), Buffalo Prenatal and Perinatal Network and Maternal Infant Community Health Collaborative. MFSH to continue to support and refer mom's to the VNA for breastfeeding follow up.

#### **Evidence-Based Sources:**

- U.S. Department of Health and Human Services (2011). The Surgeon General's Call to Action to Support Breastfeeding Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General. (Actions 1, 2,3, 8 and 9: pgs. 38-40, 45-47)
- [Baby-Friendly USA ~ Upholding the Highest Standards of Infant Feeding Care \(babyfriendlyusa.org\)](http://babyfriendlyusa.org)
- Great Beginnings NY,  
[https://www.health.ny.gov/community/pregnancy/breastfeeding/great\\_beginnings/](https://www.health.ny.gov/community/pregnancy/breastfeeding/great_beginnings/)

#### **Outcomes:**

- 2022, 2023, 2024 – John R. Oishei Children's Hospital and Millard Fillmore Suburban Hospital will continue to implement breastfeeding education and promotion activities to increase "exclusive" and "initiation" breastfeeding rates as indicated below:

<b>Baseline and Projected Breastfeeding Rates for John R. Oishei Children's Hospital</b>		
<b>Year</b>	<b>Exclusive</b>	<b>Initiation</b>
<b>Baseline 2021 – 3,626 live births</b>	<b>36.2%</b>	<b>71.3%</b>
<b>Projected 2022</b>	<b>37%</b>	<b>72%</b>
<b>Projected 2023</b>	<b>38%</b>	<b>73%</b>
<b>Project 2024</b>	<b>39%</b>	<b>74%</b>
<b>Baseline and Projected Breastfeeding Rates for Millard Fillmore Suburban Hospital</b>		
<b>Year</b>	<b>Exclusive</b>	<b>Initiation</b>
<b>Baseline 2021 – 2,874 live births</b>	<b>46%</b>	<b>80%</b>
<b>Projected 2022</b>	<b>47%</b>	<b>82%</b>
<b>Projected 2023</b>	<b>48%</b>	<b>85%</b>
<b>Projected 2024</b>	<b>49%</b>	<b>85%</b>

*\*Note that 63.8% of patients at OCH and 14.1% of patients at MFSH are insured through Medicaid The NYS Prevention Agenda 2024 exclusive breastfeeding goal among infants insured by Medicaid is 38.2%.*

#### **Person(s) Responsible:**

- OCH – Director Women's Services, Nursing Supervisor, Labor & Delivery, Clinical Nurse Educators
- MFSH – Director Women's Services, Clinical Nurse Educators

#### **Partners**

- Increasing breastfeeding rates is also a priority of the Erie County Department of Health.

## **Monitoring Plan and Partner Engagement**

Implementation of each of the Erie County and Niagara County goals, objectives, activities and outcomes identified in the above work plan as well as tracking progress and making any mid-course corrections is the responsibility of specific Kaleida Health clinical and site leaders. Community Service Plan staff will be responsible for reporting progress and results in annual Community Health Needs Assessment-Community Service Plan updates.

Kaleida Health will continue to participate as a partner in both the Erie County and Niagara County work groups to assess progress of the goals, objectives, activities and outcomes included in the Erie County and Niagara County plans, and make mid-course corrections as necessary. Both the Erie County and Niagara County work groups plan to meet on at least once annually throughout 2023 and 2024 in addition to emailed communications.

## **Dissemination to the Public**

This Kaleida Health 2022-2024 Community Health Needs Assessment-Community Service Plan (CHNA-CSP) is available to the public in the Community Health section of the Kaleida Health website at [www.kaleidahealth.org/community/](http://www.kaleidahealth.org/community/) under Publications and Resources. A paper version of this plan is available upon request. Written comments on the 2022-2024 CHNA-CSP are invited and a “comment link” is provided next to the plan found on the Kaleida Health website. Kaleida Health did not receive any comments on its 2019-2021 CHNA-CSP.

## **Board Approval**

The Kaleida Health Board of Directors approved this document on December 15, 2022.