Contents

From the Desk of the Public Health Director.............................................1
Health Department Staff ........................................................................2
Vision, Mission, and Core Values .............................................................4
Monitor health status to identify and solve community health problems ....5
  Community Health Assessment/Community Health Improvement Plan........5
Diagnose and investigate health problems and health hazards in the community ..................................................................................8
  Communicable Disease Prevention .........................................................8
  Environmental Contaminant Control .................................................13
  Vector Borne and Zoonotic Disease Control Programs .........................16
  Public Health Emergency Preparedness ............................................21
  County Laboratory ............................................................................26
Inform, educate, and empower people about health issues .................28
Health Education ...................................................................................28
  School Age Programming ...................................................................28
  School and Community Outreach .......................................................30
  Adult and Community Based Programming ........................................31
Mobilize community partnerships to identify and solve health problems .................................................................34
Develop policies and plans that support individual and community health efforts .................................................................39
  Board of Health ................................................................................39
  Strategic Plan ..................................................................................41
Enforce laws and regulations that protect health and ensure safety ........43
  Regulated Inspections ....................................................................43
  Water Supply Compliance and Protection ......................................44
  Wastewater ......................................................................................46
  Permitted Facility Inspections ..........................................................48
  Enforcement ....................................................................................54
Link people to needed personal health services and assure the provision of care when otherwise available .................................................55
  Community Health Clinics ...............................................................55
  Home Care .......................................................................................59
  Early Care .......................................................................................64
  Physically Handicapped Children's Program (PHCP) / ........................66
  Children with Special Health Care Needs Program (CSHCN) ...............66
The Ten Essential Public Health Services
From the Desk of the Public Health Director

It is my pleasure to present to you the Cattaraugus County Health Department’s 2018 Annual Report. This report provides a brief overview of the many services that the department provides in an effort to preserve and promote public health in Cattaraugus County.

During the year, the department has seen itself more engaged in addressing health problems through a collaborative community effort. Public and private partners came together over many months to implement goals and objectives in the Community Health Improvement Plan.

Developing and implementing healthy meeting and vending machine policies, increasing cancer screening rates, participating in trainings for suicide prevention are just a few of the evidence based initiatives that the community partners implemented in an effort to improve the health and well-being of Cattaraugus County residents.

The department has partnered with Olean General Hospital and other community partners to begin a new 2019-2021 Community Health Assessment. We look forward to this community collaboration in order to improve the health outcomes of the residents of Cattaraugus County.

The department celebrated its first year as a nationally accredited health department and submitted its first annual report to the public health accreditation board. Accreditation has highlighted the department’s strengths and allowed the department to identify and address areas for quality and performance improvement. Most notable, accreditation has encouraged better communication and collaboration among the department’s various divisional programs, our governing entity, partners, community members, and other external stakeholders.

Cattaraugus County Health Department is on the front line for prevention, helping our residents lead healthier lives preventing disease and injuries; ensuring access to safe food, water, clean air and preparing for life savings emergencies. In 2018, the department collaborated with seven county departments to develop a mapping application to respond to disasters that could be encountered by home based clients. This application will identify our most vulnerable clients. In order to safeguard the health of Cattaraugus County residents, the department was instrumental in working with the Board of Health to pass an ordinance requiring managers of medium and high risk food establishments to complete a certified food protection manager training course in order to serve food in a safe and sanitary manner.

We are pleased to share this annual report with you and would like to thank you for taking the time to familiarize yourself with our dynamic programs and quality services. It is a pleasure to serve our residents and we look forward to maintaining a healthy relationship with you in the upcoming years.

Sincerely,

Kevin D. Watkins, MD
Kevin D. Watkins, MD, MPH
Public Health Director
Health Department Staff – 2018

Kevin D. Watkins, MD, MPH – Public Health Director
Gilbert N. Witte, MD – Medical Director
Debra Lacher – Secretary to the Public Health Director

Certified Home Health Agency Staff
Lynne Moore - Director of Patient Services
Susan Andrews – Part time Director of Patient Services
Sue Feldbauer – Supervising Community Health Nurse
Sandy Grey - Supervising Community Health Nurse
Barb Parish – Supervising Community Health Nurse
Kristin Brown – Community Health Nurse – Intake
Laura Fuller RN – Medical Services Specialist
David Fancher – QAPI
Teneille Andrews – QAPI
Cheri Antle – Community Health Nurse
Amit Benedict - Community Health Nurse
Charity Burton - Registered Nurse
Gina Chaffee - Community Health Nurse
Melissa Chamberlain – Community Health Nurse
Ashley Dahill – Registered Nurse
Patricia Feuchter - Community Health Nurse
Brooke Schnell - Community Health Nurse
Janell Wellman - Community Health Nurse
Earlena Baer - Keyboard Specialist II
Deborah Pettinato - Keyboard Specialist II
Susan Boyle - Account Clerk Typist
Carol Skudlarek - Authorizations
Erica Andra – Community Health Nurse
Joshua Creed – Registered Nurse
Sidney Early - Community Health Nurse
Nancy Fuller – Community Health Nurse
Tyler Harvey – Community Health Nurse
Abbey Hayes - Community Health Nurse
Lois Lowry - Community Health Nurse
Jennifer Rasinski - Community Health Nurse
Michelle Jennings – Keyboard Specialist II
Meegan Howard – Community Health Nurse
Karin Jochen – Community Health Nurse
Chastity Standish – Community Health Nurse
Melissa Spencer – Registered Nurse
Karen Hoffmann – Keyboard Specialist II
Peggy Davis – Per Diem Clerical

Environmental Health Staff
Eric Wohlers – Environmental Health Director
Raymond Jordan – Senior Sanitarian
Timothy Zerfas – Water Resource Specialist
Chris Covert – Sanitarian
Eli Rust – Sanitarian
Richard Dayton – Sanitarian
Reene Herc – Sanitarian
Andrew Wolf – Sanitarian
Michael Hastings – Sanitarian
Samuel Dayton – Sanitarian
Rhonda Kelley – Sanitarian
Elaine Fowler – Keyboard Specialist II
Desiree Ottley – Keyboard Specialist
Regina Rogers – Keyboard Specialist

Early Intervention
Kevin Watkins, MD, MPH – Early Intervention Official
Patty Cheek – Service Coordinator
Peggy Keller – Service Coordinator
Jenn Schosek – Service Coordinator
Nikki Pratt - Child Find Assistant
Lanette Shaw –Keyboard Specialist II

Financial Division Staff
Colette Lulay-Pound – Administrative Officer
Tony Smrek – Senior Accountant
Jeff Toner – Accountant
Michelle Spring – Junior Accountant
Lori Holmes – Senior Account Clerk Typist
Pat Metler – Senior Account Clerk Typist
Amy Weaver – Sr. Medical Billing Clerk
Heather Kellogg – Medical Billing Clerk
Mary Jo Pula – Medical Billing Clerk
Rachel Chesner – Sr. Account Clerk Typist

Health Education
Debra Nichols – Health Educator
Tara Leonard - Reproductive Health Educator

Children with Special Health Care Needs
Gina Parks – Resource Coordinator
Cattaraugus County Health Department - 2018 Annual Report

CCHD Staff

Maternal Child Health & Community Health Staff
Paul Schwach, MD – Clinical Physician
Kerime Perese – Nurse Practitioner
Gayle Faulkner - Community Health Nurse
Laurie McClory - Community Health Nurse
Laurie Rzucek - Community Health Nurse
Shawna Trudeau – Community Health Nurse
Adrienne Ratzel – Keyboard Specialist II
Lora Prey – Keyboard Specialist II
Karen Hoffmann – Keyboard Specialist II

Laboratory Staff
Donald Higgs, MD – Lab Director
Paula Ketchner – Lab Supervisor
Kandra Yeager – Clinical Laboratory Technician
Kimberly Stewart – Clinical Laboratory Technologist
Amy Johnson - Phlebotomist

Public Health Emergency Preparedness
Shomita Steiner, PhD - Emergency Preparedness Director

WIC
Donna Higley – Director
Allison Maloney – MS, RD, CLC
Michele Phelps – MS, RD, CLC
Rachel Renniger – Qualified Nutritionist
Suzanne Walters – Senior Nutrition Program Assistant
Christian Bowser – Nutrition Program Assistant I
Molly Higgins – Nutrition Program Assistant I
Carla Jefferlone – Breast Feeding Peer Counselor
Sara Isaman – Breast Feeding Peer Counselor
Vision, Mission, and Core Values

Vision
A community that embraces excellence and collaboration, capable of improving the population’s health through data-driven decision making and policy development.

Mission Statement
To engage and empower the public of all ages to live healthier lifestyles through efforts of education, prevention, promotion, monitoring, accessibility, affordability, technology, testing, diagnosing, and treating.

Core Values

**Excellence**
Work to strengthen the county’s public health infrastructure.

**Collaboration**
Continue public health partnerships with private, non-profit and faith based organizations, government and educational entities.

**Compassion**
Acknowledging ideas and opinions of every employee, citizen and consumer while working with the community in an empathetic and respectful manner.

**Innovation**
Cutting edge /evidence based approach to deliver public health.

**Professionalism**
A high standard of competence and responsibility, while striving for occupational growth.

**Integrity**
Delivering services ethically, morally, honestly among employees, management and the public.

**Accountability**
Taking ownership of our professional duties, conduct, actions and resources entrusted to us.
Monitor health status to identify and solve community health problems.

**Introduction:** Essential Service One includes the accurate, periodic assessment of the community’s health status, the identification of health risks, attention to vital statistics and disparities, and the identification of assets and resources. The Cattaraugus County Health Department collaborates with a diverse group of community partners to address community health problems by assessing the health status of the community through formal and informal needs assessments and data analysis. Highlighted in this section is an update on the Community Health Assessment efforts and Community Health Improvement Plan progress.

### Community Health Assessment/Community Health Improvement Plan

#### 2018 Outcomes:

- Local health care providers increased breast cancer screening rates by 5%.
- Local health care providers increased colorectal cancer screening rates by 3%.
- Local health care providers increased percentage of patients screened for diabetes by 5%.
- 455 people were trained to administer Narcan.
- 379 people attended Suicide Prevention Training.
- 961 Community Surveys were completed.

<table>
<thead>
<tr>
<th>Leading Health Behaviors</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco Use</td>
<td>18%</td>
<td>23%</td>
</tr>
<tr>
<td>Obesity</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>Physical Inactivity</td>
<td>26%</td>
<td>29%</td>
</tr>
<tr>
<td>Excessive Drinking</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>Alcohol-Impaired Deaths</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>Sexually Transmitted Disease</td>
<td>253.5*</td>
<td>356.2*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leading Causes of Premature Death (death before age 75)</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>291</td>
<td>299</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>231</td>
<td>229</td>
</tr>
<tr>
<td>Chronic lower respiratory disease</td>
<td>62</td>
<td>78</td>
</tr>
<tr>
<td>Unintentional injury</td>
<td>53</td>
<td>76</td>
</tr>
<tr>
<td>Diabetes</td>
<td>51</td>
<td>43</td>
</tr>
<tr>
<td><strong>Years of potential life lost</strong></td>
<td>6,900 years</td>
<td>7,300 years</td>
</tr>
</tbody>
</table>

*cases per 100,000

**SOURCE:** County Health Rankings
The New York State Department of Health (NYSDOH) tasks each local health department with developing the Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP) every three years. The NYSDOH’s Prevention Agenda outlines five priority areas that are the focus for the CHA. Local health departments are encouraged to work with local hospitals to write a combined CHA/CHIP. The CHA’s purpose is to determine the greatest health needs and concerns in Cattaraugus County, by gathering relevant data. Table 1 outlines data points that were highlighted in the 2016 - 2018 CHA. The CHIP provides focused action items for community partners (Health Department, hospitals, non-profit agencies etc) to engage in concerted efforts, addressing the identified needs and concerns, to improve the health of residents.

The Cattaraugus County Health Department partnered with Olean General Hospital in 2016 to write a 2016 -2018 Community Health Assessment. Strategy Solutions, a consulting firm, was hired to assist in the data collection and data analysis. A steering committee, comprised of representatives from a broad sector of the community, was formed and was asked to analyze the data and choose two of the five Prevention Agenda priorities as the focus of the Community Health Improvement Plan. The focus of the 2016 -2018 CHIP were to (1) Prevent Chronic Disease, and to (2) Promote Mental Health and Prevent Substance Abuse. Activities identified in the 2016 – 2018 have been completed Table 2 outlines improvements in performance measures selected for the 2016 -2018 CHIP.

A new CHA/CHIP cycle will begin in 2019. A new steering committee comprised of representatives from a broad sector of the community was formed in 2018 to drive this process. Primary data collection efforts began in March 2018 with the launch of a 22 question community intercept survey distributed throughout the county at community events (Home Show, County Fair, and Senior Forum), to local agencies, and at senior nutrition sites. A larger, 54 question comprehensive survey was conducted between October 1 and December 1, 2018. The comprehensive community health needs assessment survey was made available in electronic format and shared via email, on the county’s and Olean General Hospital’s websites, and social media. Partnering agencies shared the survey with their email contact lists and on their social media pages, as well.

Focus group and stakeholder interviews were also conducted, representatives from a broad sector of the community were asked to discuss the health needs and social determinates of health affecting the populations they serve.

Once primary and secondary data is analyzed the steering committee will reconvene and select priorities for the 2019 – 2021 Community Health Improvement Plan. Sub-committees will be formed to develop an action plan that will focus on the priorities selected.
Table 2

Cattaraugus County 2016 - 2018: CHIP Indicator Tracker

2018 Update

<table>
<thead>
<tr>
<th>Improvement</th>
<th>Decline</th>
<th>No change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New measure (baseline and progress not available)

**Partners:** FMG= Foothills Medical Group, UPC=Universal Primary Care, OMG=Olean Medical Group

<table>
<thead>
<tr>
<th>Progress</th>
<th>Health Focus Area and Goals</th>
<th>Baseline (Year)</th>
<th>2017 (Year)</th>
<th>2018 (Year)</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Prevent Chronic Diseases: Reduce Obesity in children and adults</td>
<td>Number of agencies/organizations that have passed Healthy Meeting and/or Healthy Vending Policies</td>
<td>8 (2016)</td>
<td>4 (2017)</td>
<td>10 (2018)</td>
</tr>
<tr>
<td></td>
<td>Number of municipalities that have passed Complete Street Policies</td>
<td>0 (2016)</td>
<td>6 (2017)</td>
<td>0 (2018)</td>
<td>5/year</td>
</tr>
<tr>
<td>+</td>
<td>Prevent Chronic Diseases: Increase access to high quality chronic disease preventive care and management in both clinical and community settings</td>
<td>Percentage of breast cancer screening rates</td>
<td>FMG: 29% UPC: 56% OMG: 64% (2016)</td>
<td>FMG: 32% UPC: 60% OMG: 61% (2017)</td>
<td>FMG: 60% UPC: 60% OMG: 80% (2018)</td>
</tr>
<tr>
<td>+</td>
<td>Number of schools where evidence-based training programs were implemented</td>
<td>0 (2016)</td>
<td>5 (2017)</td>
<td>6 (2018)</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>Number of drugs collected through drop boxes</td>
<td>430 pounds (2016)</td>
<td>1761 pounds (2017)</td>
<td>1136 pounds (2018)</td>
<td>-</td>
</tr>
<tr>
<td>+</td>
<td>Number of people trained to administer Narcan.</td>
<td>253 (2016)</td>
<td>272 (2017)</td>
<td>455 (2018)</td>
<td>-</td>
</tr>
<tr>
<td>+</td>
<td>Number of individuals trained in suicide prevention.</td>
<td>-</td>
<td>45 (2017)</td>
<td>379 (2018)</td>
<td>-</td>
</tr>
</tbody>
</table>
Diagnose and investigate health problems and health hazards in the community

Introduction: Essential Service Two includes provision of epidemiological identification of emerging health threats, active investigation and prevention of infectious diseases, prevention of vaccine preventable disease through immunization, and the active investigation and prevention of human health hazards such as water, food, vector borne or zoonotic illnesses. Essential Service 2 also include the availability of diagnostic services, which includes the department’s Laboratory services. Programs and services within the Nursing, Environmental Health, Public Health Emergency Preparedness, and Laboratory Divisions are highlighted in this section.

Communicable Disease Prevention

2018 Outcomes

- **606** cases of various communicable diseases were reported in Cattaraugus County.
- Incidences of Chlamydia, Chronic Hepatitis C and gonorrhea were the most frequent.
- **259** Hepatitis A, and **140** Hepatitis B vaccinations were provided to at-risk individuals.
- **2,258** doses of influenza vaccine were administered to residents at community sites, schools and health facilities.
- **16** individuals received care in the Tuberculosis Clinic and 1 was started on prophylactic medication.

Communicable Disease prevention, surveillance, and containment are core functions of the Cattaraugus County Health Department. All cases of communicable disease are investigated by a communicable disease nurse to ensure that every possible measure was taken to prevent, detect, treat and contain the spread of disease. In 2018, **606** cases of various communicable diseases were reported in Cattaraugus County, compared to **403** cases in 2017.

Chlamydia continues to be the most common communicable disease because most infected people are asymptomatic and lack abnormal physical examination findings. However, in 2018 when comparing communicable disease frequency rates to the 2017 communicable disease frequency rates, Chlamydia and Chronic Hepatitis C increased while Lyme disease showed a marked decrease (Table 3).
### Table 3: Communicable Disease Report

<table>
<thead>
<tr>
<th>Disease</th>
<th>2018</th>
<th></th>
<th>2017</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Campylobacteriosis</td>
<td>7</td>
<td>9</td>
<td>9</td>
<td>11.6</td>
</tr>
<tr>
<td>Cryptosporidiosis</td>
<td>1</td>
<td>1.3</td>
<td>4</td>
<td>5.1</td>
</tr>
<tr>
<td>E.Coli Shiga Toxin</td>
<td>1</td>
<td>1.3</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>Ehrlichiosis</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Giardiasis</td>
<td>10</td>
<td>12.9</td>
<td>4</td>
<td>5.1</td>
</tr>
<tr>
<td>Haemophilus Influenzae, Not B</td>
<td>1</td>
<td>1.3</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Hepatitis C, Chronic</td>
<td>70</td>
<td>90.1</td>
<td>65</td>
<td>83.4</td>
</tr>
<tr>
<td>Legionellosis</td>
<td>5</td>
<td>6.4</td>
<td>4</td>
<td>5.1</td>
</tr>
<tr>
<td>Lyme Disease</td>
<td>15</td>
<td>19.3</td>
<td>33</td>
<td>42.4</td>
</tr>
<tr>
<td>Meningitis, Bacterial</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Pertussis</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Salmonellosis</td>
<td>13</td>
<td>16.7</td>
<td>11</td>
<td>14.1</td>
</tr>
<tr>
<td>Strep, Group A Invasive</td>
<td>2</td>
<td>2.6</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Strep, Group B Invasive</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>5.1</td>
</tr>
<tr>
<td>Strep Pneum, Invasive</td>
<td>5</td>
<td>6.4</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Syphilis</td>
<td>1</td>
<td>1.3</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>44</td>
<td>56.6</td>
<td>47</td>
<td>60.3</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>216</td>
<td>278.1</td>
<td>209</td>
<td>268.2</td>
</tr>
</tbody>
</table>

Rates are defined as: Cases/100,000 population

**Hepatitis C Program**

Hepatitis C (HCV) is a viral infection that causes liver inflammation, sometimes leading to serious liver damage. The infection spreads when blood contaminated with the virus enters the bloodstream of an uninfected person. Before widespread screening of the blood supply in 1992, HCV was spread through blood transfusions and organ transplants. Today, most people become infected with HCV by sharing needles or other equipment to inject drugs. Many people with HCV do not have symptoms and do not know they are infected. Symptoms of chronic HCV can take decades to develop and when they do appear, are often a sign of advanced liver disease. Testing is important to identify infection while treatment can be successful. CCHD provides HCV rapid testing to anyone with risk factors. In 2018, 51 at risk individuals were tested with **two (2)** reactive results, compared to 46 at risk individuals were tested with **five (5)** reactive results in 2017.
Tuberculosis Control
Tuberculin skin testing (TST) was provided to 493 clients with one of those individuals testing positive for latent TB infection. Treating latent TB infection can prevent progression to active TB disease. Individuals with a positive skin test are encouraged to follow up with either the CCHD or their private physician. In 2018, 16 individuals received care at CCHD’s Chest Clinic and one (1) was started on prophylactic medication, compared to 2017 when six (6) individuals received care and three (3) were started on prophylactic medication. There has been no active TB cases in Cattaraugus County since 2009.

Immunization Services
CCHD provides immunization services at the Olean, Salamanca and Machias offices. Community health nurses conduct influenza vaccine clinics at community locations throughout the county. The number of routine childhood and adult immunizations administered have been on a downward trend as more primary care providers and pharmacies offer vaccination. Table 4 lists the types and numbers of vaccines given by the CCHD to children and adults. In 2018, the number of vaccination for Hepatitis A, Shingles, and Pneumonia increased compared to the same vaccinations in 2017. The increase could be attributed to increased awareness of the benefits of these vaccines, and the change in insurance coverage to include adult vaccinations at no cost to those insured. The number of vaccinations for Human Papilloma Virus (HPV), Tetanus Diphtheria Acellular Pertussis (Tdap), Meningococcal Meningitis, Typhoid, and Yellow Fever were significantly lower in 2018 when compared to 2017. The decrease could be attributed to the increased administration of vaccines by pharmacies and primary care physicians.

October 2018 Employee Flu Clinic
Table 4 2017 and 2018 Immunizations Administered by CCHD

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphtheria Tetanus Acellular Pertussis-DTaP</td>
<td>15</td>
<td>0</td>
<td>15</td>
<td>17</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>112</td>
<td>147</td>
<td>259</td>
<td>19</td>
<td>76</td>
<td>95</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>21</td>
<td>119</td>
<td>140</td>
<td>31</td>
<td>145</td>
<td>176</td>
</tr>
<tr>
<td>Haemophilus Influenzae Type b (Hib)</td>
<td>11</td>
<td>5</td>
<td>16</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Human Papillomavirus HPV</td>
<td>13</td>
<td>4</td>
<td>17</td>
<td>49</td>
<td>13</td>
<td>62</td>
</tr>
<tr>
<td>Inactivated Polio -IPV</td>
<td>31</td>
<td>12</td>
<td>43</td>
<td>30</td>
<td>4</td>
<td>34</td>
</tr>
<tr>
<td>Japanese Encephalitis</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Meningococcal</td>
<td>24</td>
<td>7</td>
<td>31</td>
<td>86</td>
<td>31</td>
<td>117</td>
</tr>
<tr>
<td>Measles Mumps Rubella - MMR</td>
<td>21</td>
<td>71</td>
<td>92</td>
<td>38</td>
<td>79</td>
<td>117</td>
</tr>
<tr>
<td>Pneumococcal</td>
<td>14</td>
<td>157</td>
<td>171</td>
<td>3</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>Tetanus Diphtheria Td</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Tetanus Diphtheria Acellular Pertussis - Tdap</td>
<td>3</td>
<td>7</td>
<td>10</td>
<td>70</td>
<td>132</td>
<td>202</td>
</tr>
<tr>
<td>Typhoid</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>28</td>
<td>119</td>
<td>147</td>
</tr>
<tr>
<td>Varicella</td>
<td>44</td>
<td>31</td>
<td>75</td>
<td>51</td>
<td>16</td>
<td>67</td>
</tr>
<tr>
<td>Yellow Fever</td>
<td>4</td>
<td>6</td>
<td>10</td>
<td>7</td>
<td>30</td>
<td>37</td>
</tr>
<tr>
<td>Shingles (Shingrix)</td>
<td>0</td>
<td>239</td>
<td>239</td>
<td>0</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Totals</td>
<td>313</td>
<td>810</td>
<td>1123</td>
<td>439</td>
<td>799</td>
<td>1238</td>
</tr>
</tbody>
</table>

Hepatitis Vaccination Program

The Cattaraugus County Health Department provides the Hepatitis A and/or B vaccine, at no cost, to any individual at risk. The risk of Hepatitis A infection is associated with a lack of safe water, and poor sanitation and hygiene. Hepatitis A is usually transmitted person-to-person through the fecal-oral route or consumption of contaminated food or water. In 2018, CCHD administered 259 Hepatitis A vaccinations compared to 95 administered in 2017. A possible explanation for this increase could be attributed to recent Hepatitis A outbreaks in neighboring counties, and an increased public service messaging on the benefits of the vaccination.
The Hepatitis B virus is spread when blood, semen, or other body fluid infected with the hepatitis B virus enters the body of a person who is not infected. Healthcare and public safety workers exposed to blood on the job, and people who inject drugs or share needles, syringes, or other drug equipment are examples of populations at risk for Hepatitis B. In 2018, CCHD administered 140 Hepatitis B vaccinations, compared to 176 administered in 2017. A possible explanation for this decrease could be attributed to residents obtaining vaccines through their primary care providers.

**Influenza Vaccination Program**

Influenza (flu) is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness. Serious outcomes of flu infection can result in hospitalization or death. One of the best ways to prevent flu is to get vaccinated each year.

In 2018, the Cattaraugus County Health Department offered quadrivalent seasonal influenza vaccine. The Health Department also offered a trivalent, high-dose vaccine that is formulated to enhance the immune response of individuals over 65 years of age.

In 2018, CCHD administered 2,258 doses of influenza vaccines compared to 2,330 administered in 2017. This number includes vaccinations that were administered by the CCHD clinic, at community influenza vaccine clinics, schools, county run nursing homes, and the CCHD’s Certified Home Health Agency. In 2018, 16,705 residents throughout Cattaraugus County received an influenza vaccination compared to 14,333 in 2017.

**Provider Visits**

The Cattaraugus County immunization staff makes scheduled visits to health care providers in Cattaraugus County to provide education and information to improve their immunization service delivery, maintain safe vaccine storage and handling, and raise immunization coverage levels. Visits include vaccine educational packets, and New York State Immunization Information System (NYSIIS) data entry information to increase the number of adult and childhood immunizations entered into the statewide immunization registry. Provider visits are conducted using the AFIX model developed by the Centers for Disease Control:

- **Assessment** of the health care provider’s vaccination coverage levels and immunization practices.
- **Feedback** of results to the provider along with recommended strategies to improve processes, immunization practices, and coverage levels.
- **Incentives** to recognize and reward improved performance.
- **eXchange** of healthcare information and resources among providers within the community to facilitate best practices.

CCHD is required by the New York State Department of Health (NYSDOH) to visit 25% of all pediatric providers, there are 17 pediatricians that practice within Cattaraugus County. In 2018, four (4) visits were conducted using the AFIX model; **four (4) visits** were conducted in 2017 in compliance with NYSDOH requirements.
Environmental Contaminant Control

Modern industrialized societies inevitably release contaminants into the environment. Local, state and federal regulatory agencies are charged with minimizing the effects of such contaminants on the public’s health and the environment. Environmental Health (EH) staff periodically works with such agencies [i.e. New York State Department of Environmental Conservation (NYSDEC) and United States Environmental Protection Agency (USEPA)] to provide review and comment on documents pertaining to assessment and cleanup of contaminated sites in the county. Additionally, both EH staff and Community Health Nurses have a primary role in implementing specific regulatory programs associated with exposure to sources of lead poisoning.

2018 Outcomes
- 58 home visits were conducted for children with elevated blood lead levels
- Sixty seven (67) point of care lead tests were conducted at WIC clinics and other community settings.
- 9 children with an elevated blood lead levels of 15ug/dl or higher were referred to Environmental Health
- 11 residences associated with the 9 cases of elevated blood lead levels of 15ug/dl or higher were investigated by EH staff.
- EH staff participated in review of cleanup efforts at 5 hazardous waste sites throughout the county.

Childhood Lead Poisoning Prevention Program
Protecting children from exposure to lead is important to lifelong good health. No safe blood lead level in children has been identified and even low levels of lead in blood have been shown to affect IQ, behavior, and academic achievement. Lead-based paint and lead contaminated dust are common sources of lead exposure for children in Cattaraugus County and are often associated with housing stock built before 1978 that is poorly maintained. CCHD has organized the Southern Tier Lead Coalition called the Lead(Pb)Smart Partnership to promote the primary prevention goals of promoting awareness and lead safe housing policy at the community level.

NYS law requires healthcare providers to test children for lead at one and two years of age. Figure 1 illustrates the number of children with confirmed elevated blood lead levels (EBLL) from 2014 to 2018. In 2017, the CCHD revised its policy regarding when to begin intervention to align with Center for Disease Control recommendations. Previously, nurses would conduct home visits when a child had an elevated blood lead level (EBLL) of 10ug/dl and above, with the policy change, nurses now conduct home visits when a child’s EBLL is 5ug/dl or higher. In 2018, CCHD identified 31 of children with EBLL of 5ug/dl—9.9ug/dl. Table 5 describes the recommended interventions for varying blood lead levels in children.
In 2018, CCHD monitored 1,448 blood lead levels as compared to 1,493 in 2017. Blood lead level testing is monitored via electronic reporting on the Heath Commerce System (HCS) to ensure that all children who are tested receive appropriate follow-up.

In 2018, CCHD nurses made 58 home visits to children with EBLL, as compared to 30 home visits in 2017. The increase is attributed to the change in CCHD policy regarding when intervention should begin for a child with an EBLL. With funding from NYSDOH, CCHD’s lead program continues to provide point of care lead testing at WIC sites. This provides an excellent opportunity to address an at risk population through education and testing. In 2018, 67 point of care lead tests were conducted at WIC clinics and other community settings, as compared to 92 point of care lead tests in 2017. Most point of care tests are conducted on children two years of age, aggressive outreach has increased the number of providers testing at age two, reducing the need for CCHD point of care testing.

Environmental Health (EH) staff are responsible for the assessment of a child's living environment if elevated blood lead levels are 15ug/dl or higher. In 2018, the CCHD nurses referred 9 children to EH, as compared to 8 in 2017. EH staff conducted environmental investigation at 11 residences associated with these children as compared to 9 in 2017. Lead paint hazards were identified at all 11 residences and subsequent remediation work was started and/or completed.

![Figure 1. Number of Cases of Childhood EBLL by Intervention Strategy](image-url)

Note: Tracking of EBLL of 5 – 9.9 began in 2018
### Table 5

**Intervention Strategy by Blood Lead Level**

<table>
<thead>
<tr>
<th>Lead Level</th>
<th>Intervention</th>
</tr>
</thead>
</table>
| <5ug/dl    | • Anticipatory guidance about common sources of lead exposure.  
            • Follow-up blood lead testing at recommended intervals based on child’s age. |
| 5–14.9ug/dl| • Follow up with family within 5 days for home visit by nurse for assessment and guidance about common sources of lead exposure.  
            • Case management to ensure blood levels decrease. |
| 15-24.9 ug/dl | • Follow up with family within 5 days for home visit by nurse for assessment and guidance about common sources of lead exposure.  
               • Environmental Health (EH) staff will also conduct a visit to any resident to perform assessment, educate family and provide information on effective abatement strategies.  
               • Case management to ensure blood levels decrease. |
| 25-44.9 ug/dl | • Follow up within 2 days, for home visit by nurse for assessment and guidance about common sources of lead exposure.  
               • Environmental Health (EH) staff will also conduct a visit to any resident to perform assessment, educate family and provide information on effective abatement strategies.  
               • Case management to ensure blood levels decrease.  
               • Encourage patient physician to consult Regional Lead Resource Center |
| 45-69 ug/dl | • Nurse will conduct home visit within 24 hrs.  
             • Environmental Health (EH) staff will also conduct a visit to any resident to perform assessment, educate family and provide information on effective abatement strategies.  
             • Notify NYSDOH.  
             • Follow-up blood test within 48 hours.  
             • Case management to ensure blood levels decrease.  
             • Encourage patient physician to consult Regional Lead Resource Center |

Source: CDC guidelines

### Hazardous Chemical/Radiological Waste Site Remediation

As mentioned previously the EH Division works with both the NYSDEC and USEPA to facilitate and monitor the cleanup of hazardous waste sites throughout the county. The Department acts as the county repository for all remedial investigation (RI) reports, health risk assessment (HRA) studies, and long-term monitoring reports and data for all existing sites. EH staff occasionally attend public informational meetings and formally comment on environmental impact statements (EIS) and proposed records of decision (ROD) where remediation alternatives are being considered. In 2018, the CCHD participated in review of the following sites / projects:

- West Valley Demonstration Project (County representative on Citizen Task Force)
- ALCAS/Olean Wellfield remedial investigation
- Annual testing of private wells in the Little Valley Trichloroethylene (TCE) site
- AVX remedial investigation in Olean
- Blackmar Well Site in Town of New Albion
Vector Borne and Zoonotic Disease Control Programs

Vector control is often the easiest and most cost effective way to minimize health and quality of life impacts associated with insects and vector borne disease. Rabies vaccine clinics, testing, post-exposure immunizations, and education are provided by the Cattaraugus County Health Department to mitigate the transmission of rabies.

2018 Outcomes
- 89 mosquito specimen pools were submitted to the state arbovirus laboratory for analysis. There were two (2) detections of West Nile virus and one (1) detection of Jamestown Canyon virus.
- 14 human cases of Lyme disease were reported.
- 215 animal bite investigations were conducted by EH staff.
- 85 people were referred to the Nursing Division for rabies post-exposure immunization.
- 100 specimens were submitted to the NYS Rabies Laboratory for analysis, of which 9 were positive (6 bat, 2 raccoon, and 1 woodchuck).
- 1,498 rabies vaccinations were administered at pet vaccination clinics held throughout the county.

Mosquito Surveillance and Control Program
EH staff conducts surveillance for both mosquito larvae and adult mosquitoes beginning in May and continues surveillance into August. In 2018, 89 mosquito specimen pools were submitted to the state arbovirus laboratory for analysis, as compared to 85 in 2017. There were two detections of West Nile virus, and one detection of Jamestown Canyon virus in 2018. Although locally acquired human infection with Zika virus has not been detected in Cattaraugus County, surveillance for mosquitoes that carry the Zika virus is part of the surveillance control program. A comprehensive Zika action plan has been developed to address the detection of the invasive Aedes aegypti/albopictus mosquitoes and potential transmission of the exotic mosquito-borne viral infection. No specimens have been obtained since this surveillance began in 2016.

NYSDOH continues to conduct limited adult mosquito trapping in an area west of Salamanca for Eastern Equine Encephalitis (EEE). In 2018, all specimens obtained during this effort tested negative for EEE, the same result was reported in 2017.
**Tick-Borne Disease Surveillance**

As part of annual surveillance efforts to monitor for certain tick-borne pathogens, ticks from locations within Cattaraugus County were collected and tested for the presence of the following pathogens commonly found in the blacklegged ticks (known as deer ticks, *Ixodes scapularis*):

- *Borrelia burgdorferi* (bacterial causative agent of Lyme disease)
- *Anaplasma phagocytophilum* (rickettsial causative agent of anaplasmosis)
- *Borrelia miyamotoi* (bacterial causative agent of a relapsing fever illness)
- *Babesia microti* (protozoan causative agent of babesiosis)
- Deer tick virus and Powassan virus lineages (viral causative agent of Powassan encephalitis)

Data from an average of seven to ten geographical locations sampled in 2014-2018 are represented graphically in Figure 2. *B.burgdorferi* was the most common pathogen identified in the nymph (young adult) and adult ticks tested within Cattaraugus County, followed by *A.phagocytophilum* and *B. miyamotoi*. Compared to 2017, more nymphs and adults tested positive for *B.burgdorferi* and *A.phagocytophilum* in 2018 (Figure 3).

Lyme disease is caused by the bacterium *Borrelia burgdorferi* and is transmitted to humans through the bite of infected blacklegged ticks. Typical symptoms include fever, headache, fatigue, and a characteristic skin rash called erythema migrans. If left untreated, infection can spread to joints, the heart, and the nervous system. Lyme disease is diagnosed based on symptoms, physical findings (e.g., rash), and the possibility of exposure to infected ticks. In Cattaraugus County the number of human cases of Lyme disease varies from year to year, Figure 3 illustrates the variability associated with the number of Lyme Disease cases for the last seven years.

Improved surveillance and testing methods represented graphically could account for the increased positive results identified. Overall, the data suggests the need for continued public education to promote awareness of the prevalence of risk factors for tick-borne diseases in the county and preventive measures that the public can take to protect themselves against these diseases.

Tick warning signs were placed in key areas throughout the county.
Figure 2. Tick borne disease incidence in Cattaraugus County 2014-2018

Figure 3. Human Cases of Lyme disease 2012 - 2018
Rabies Program
Rabies is a fatal, progressive neurological disease transmitted by a virus found in the saliva and nervous tissue of infected mammals. If individuals receive prompt treatment following an exposure to the virus, rabies can be prevented. The majority of rabies exposures occur due to potential contact with bats.

In 2018, EH staff conducted 215 animal bite investigations and referred 85 persons to the Nursing Division for post-exposure immunization, compared with 2017 there were 208 animal bite investigations and 34 persons were referred to the Nursing Division. The increase could be attributed to a health promotion campaign that focused on the importance of reporting rabies exposures to the CCHD.

In 2018, a total of 100 specimens were submitted to the NYS Rabies Laboratory for analysis, of which 9 were positive (2 raccoons, 6 bats, & 1 woodchuck); compared to a total of 58 specimens of which 2 were positive (1 raccoon, 1 bat) in 2017.

Rabies Post-Exposure Vaccination Program
All rabies post-exposure cases receive coordinated case management from Community Health Nursing staff, Environmental Health staff, and private physicians. In 2018, 82 people required post-exposure rabies vaccination, compared to 35 cases in 2017. As a response to the dramatic rise in post exposure treatments, in July 2018, the CCHD issued a press release in an effort to educate residents about the proper method to capture a bat.

Figure 4 illustrates the variability associated with the number of rabies post- exposure prophylaxis treatments from the last ten years, and Figure 5 illustrates the annual breakdown of post exposure treatments by animal vector over the last five years.
Pet Vaccination Clinics
The CCHD hosts pet vaccination clinics five times throughout the year providing free rabies vaccine for dogs, cats, and ferrets. Pet vaccination clinics were held at various locations around the county in 2018. Figure 6 shows vaccinations by animal type for years 2014-2018. In 2018, 1,498 rabies vaccinations were administered compared to 1,687 administered in 2017.
Public Health Emergency Preparedness focuses on preparing personnel to respond to a public health emergency. In the event of an emergency, staff in all CCHD divisions may have to assume different and additional roles/responsibilities. The PHEP program Director works with existing CCHD divisions to ensure that training and planning prior to emergencies are undertaken to maximize the potential for a quick and effective department-wide response to a public health emergency.

2018 Outcomes

- **Drills/Exercises:** Three exercises were conducted: A Point of Dispensing (POD) exercise, a CHEMPACK exercise and a table top exercise on a food borne illness investigation.
- **Flu Clinics:** Two employee flu PODs was coordinate by the PHEP division. A total of 260 County employees and family members participated in the two flu POD clinics. 17 first responders received vaccinations via a community flu clinic.
- **Real life disaster event:** The Health Department responded to snow storm Riley that affected power supply, internet and communication (phone) access.
- **Disaster Preparedness Application:** Seven county departments collaborated to develop a mapping application for disaster preparedness response specific to home based clients.

**PHEP Division**

The Public Health Emergency Preparedness (PHEP) division coordinates and enhances the ability of the CCHD, Cattaraugus County Office of Emergency Services, First Responders, other local/county agencies and citizens to prepare for and respond to public health emergencies. The NYSDOH funds each of the 57 counties within NYS outside of New York City to prepare local, time-oriented deliverables and annual maintenance deliverables that are targeted to coincide with the Center for Disease Control and Prevention (CDC) and the Department of Homeland Security (DHS) initiatives for public safety. Completion of these deliverables is accomplished through participation in trainings (online and in-person), outreach programs, planning initiatives and implementing large-scale Point of Dispensing (PODs) operations. 2018 encompassed multiple local, time-oriented deliverables and annual maintenance deliverables.

**PHEP Responsibilities**

**Training Program /Director and Staff Training:**

In 2018, PHEP staff participated in nine (9) online and ten (10) in-person classroom based training programs. Trainings included
A. *class room based*: Radiological transport safety training hosted by the Seneca Nation of Indians (SNI) (Salamanca, NY), Native American Cultural competency training (Buffalo, NY), Access and Functional Needs (AFN) Disability Awareness training for Emergency Management hosted by SNI (Salamanca, NY), Food borne disease (FBD) table top exercise train-the-trainer (T-t-T) conducted by NYSDOH, Point of Dispensing (POD) overview training conducted by NYSDOH – Office of Health Emergency Preparedness (OHEP), Countermeasure data management system (CDMS) training conducted by NYSDOH-OHEP, Psychological First Aid T-t-T, Social media training conducted by Argonne National Labs and hosted by the West Valley Demonstration project.

B. *online*: ClinOps webinars included: Annual PHEP exercise informational session second quarter make-up, Annual PHEP exercise informational session third quarter, Pandemic flu mitigation, Discovery of the Longhorned Tick in NY: impact on PH, Steps in creating a clinical algorithm in CDMS. Additional trainings included: Medical Matters: Nuclear Radiation and Blast injuries training provided by the Medical Society of the State of NY, IS-775 – Emergency Operations Center management training, LHD Points of Distribution and Dispensing Survey Completion BP1X (BPR3), National Incident Management System (NIMS) refresh update (LHD BPR-5/HPP deliverable 3).

**Drills/Exercises:**

In addition, CCHD staff participated in various drills and exercises including: normal business hour interoperable communication drill (October, 2018) using the integrated health alert notification system (IHANS), POD exercise for a simulated Hepatitis A outbreak and a CHEMPACK exercise.

In 2018, the CCHD participated in the interoperable communications component and the hotwash discussion of the low-notice coalition surge test (CST) exercise that involved all hospitals in the Western New York (WNY) region.

In 2018, the CCHD was involved in an exercise that tested the notification, activation and set up of a POD in response to a simulated Hepatitis A outbreak. All WNY and Finger Lakes counties (with few exceptions) conducted this exercise on the same day following the same parameters. This was an opportunity to update Medical Countermeasures (MCM) and POD plans and evaluate the effectiveness of the plans in response to a mock outbreak.
This was a full scale exercise (Figure 8) that included participants from CCHD, Departments of Emergency Services, Aging, Social Services, Community Services, Veterans Services, Information Technology and the Sheriff’s department. Community partners included Seneca Nation of Indians (SNI), Southern Tier Health Care Systems (STHCS), Directions in Independent Living and Universal Primary Care (Federally Qualified Health Center). This was also the first exercise where several additional components were tested including use of a translator device (VASCO) to address language barriers, inclusion of counseling support, and inclusion of people with access and functional needs within the normal flow design. Feedback received from participants was incorporated into the AAR and into modifying the POD plans.

In 2018, PHEP staff coordinated a full scale exercise to test written plans for CHEMPACK activation and deployment. The CHEMPACK plan is a combined plan covering responses for both Cattaraugus and Allegany counties. The exercise was limited to hospitals, County and Tribal Nation Emergency Services/Management, Law Enforcement, Local Health Departments, and emergency medical services and primarily tested the timeliness of activation and deployment of resources.

In 2018, PHEP staff, together with a representative from the Environmental Health (EH) division coordinated a Food Borne Disease table-top exercise that included representatives from EH and Communicable Disease (CD) staff. This was the first of its kind exercise held at CCHD and utilized material provided by NYSDOH at the table top event. The exercise discussed an outbreak scenario modified from a real-life event that occurred in Colorado.

Flu vaccination PODs
In 2018, the PHEP division was tasked with planning and coordinating the annual influenza PODs for county employees. Two separate points of dispensing (PODs) flu clinics were organized. The Olean POD clinic had 170 attendees. The Little Valley POD clinic had 90 attendees. Although employee clinics were open to spouses and family members due to insurance coverage, the total numbers of participants at each of the clinics did not show expected increases compared to the 2017 employee POD flu clinics. This is likely due to employees obtaining vaccines from pharmacies and/or primary care providers who advertise vaccine availability starting in early August. First responders were encouraged to attend employee and community clinics organized by the CCHD and a final tally of 17 first responders were recorded as having received flu vaccines via these PODs.
Emergency Response
In 2018, Cattaraugus County fared well in regards to events that required the response of PHEP, and Emergency Services Staff.

Real-life event: A winter storm hit Cattaraugus County March 1-2, 2018. The heavy, wet snow (1-2 feet on average) caused damage in the form of fallen trees and broken power lines that affected power and telecommunications throughout the county. Damage sustained by county facilities included a disrupted fiber-optic cable system that controls telecommunications in the county buildings at Olean and Little Valley. Both phone and internet systems within these buildings operate through a Voice-over-internet protocol (VoIP) system which is housed at the Little Valley county office building. Therefore, disruption to this system resulted in loss of phone and internet functionality at both Olean and Little Valley county buildings.

Direct effects included disruption of
  a. VoIP system: Allowed the receipt of incoming phone calls but not outgoing phone calls from the VoIP phone system landlines. This was specific to 701 prefix numbers. **373 prefix numbers were not receiving incoming calls and that created another issue discussed below.**
  b. Internet: Software – NetSmart, Home Care software, which provides EMR, Synchronization and Billing, were accessible.
  c. Travel/Patient accessibility issues: Most nurses did not have issues visiting clients in their homes. Some clients informed nursing personnel to not visit due to inaccessibility of their homes (fallen trees/unplowed snow etc).

Due to hazardous travel conditions (including downed power lines, snow accumulations and fallen trees), 20.8% of home care scheduled work staff called off work on March 2, 2018. Homecare had 62.5% of its on-duty working staff to cover all required tasks (home visits, etc.) necessary for the day’s operations. The remaining 16.7% of the staff were not scheduled for work during this event.

Following this event, emergency contact information lists were generated for all divisions within CCHD and the addition of alternate contact numbers to Home care client packages was instituted. Following a meeting with County representatives, it was identified that changes to the internet and phone cables would be instituted and a new mass communication system – Everbridge – would be rolled out county wide.
Local and Regional Partnerships

EMS Advisory Council. PHEP staff participate actively in the quarterly meetings of the Cattaraugus County Emergency Medical Services Advisory Council that includes representatives from CCHD, Sheriff’s Office, County Emergency Services, Olean General Hospital (OGH), WREMAC, STEMS, SNI, Cities of Olean and Salamanca (including Fire Depts), Commercial Ambulance, Legislature, Aero-medical and County Districts. Ongoing PHEP activities were shared with the council for informational purposes and participation in activities if necessary.

WNY PHEP workgroup. As one of eight partnering counties in the Western NY region, we are fortunate to belong to a vibrant, innovative team that includes Chautauqua, Allegany, Wyoming, Genesee, Orleans, Niagara and Erie counties. Our collaboration is reflected in and sustained via regular monthly work group meetings held in Erie County.

Southern Tier Area workgroup. In addition to the WNY PHEP collaborative, we have active partnerships with local hospitals, emergency services, local tribal (Seneca Nation of Indians) and other Health Departments in the Southern Tier Area (STA). CCHD hosted the October 12, 2018 STA meeting that involved participants from Cattaraugus, Chautauqua and Allegany counties and SNI.

Seneca Nation of Indians Partnership. The PHEP staff, along with Office of Emergency Services, is actively engaged in training and preparedness planning with the Seneca Nation of Indians (SNI) Emergency Management and Health Department. In 2018, PHEP staff participated in planning meetings (coordinated by the NYS Office of Health Emergency Preparedness (OHEP)) and trained SNI partners in aspects of POD planning and CHEMPACK activation.

Home-based clients disaster response planning. CCHD along with the Dept. of Emergency Services initiated a planning group including the Certified Home Health Agency, Departments of Aging, Community Services, Social Services and Information Services to plan for disaster responses specific to home-bound clients. In partnership with the department of Real Property GIS division, initial planning began in December 2017 and was completed by December 2018. Training for participants from all involved county departments to use the application will be scheduled for mid-January and this will coincide with a DisasterLAN (DLAN) training which is a web based incident management system training for overall emergency preparedness led by Cattaraugus County Emergency Services.

Health Care Agencies. PHEP staff participates in monthly preparedness meetings and quarterly infection control meetings organized at the OGH. In 2018, OGH signed an agreement with CCHD to be a closed POD partner.
Identification of possible disease causing organisms in the body and environment, and monitoring important health indicators in each individual is crucial to understanding public health impacts across a population. Such identification requires exacting tests and scientific knowledge.

In response to this need, the Cattaraugus County Laboratory (CCL) provides a full-service clinical laboratory and water testing services. The clinical lab is a NYS certified lab in the fields of Chemistry, Hematology, Virology, Diagnostic Immunology, and Urinalysis. The CCL is also certified to perform potable and non-potable water testing for bacteria and nitrate. Outpatient services are available during all open hours and most health insurance plans are accepted.

Figures 10 and 11 illustrate the change in the number of tests performed in different categories from 2014 - 2018. Variations in physician ordering, increasing visits by outpatients, and an increasing number of patients enrolled in HMOs, which will not contract with the Cattaraugus County Lab to do their laboratory testing, contributed to the changes in various testing categories.
Figure 11. Total number of tests performed (2014-2018)
Inform, educate, and empower people about health issues

Introduction: Essential Service #3 activities include the Health Education Division efforts to utilize health education and communication sciences to (1) build knowledge and shape attitudes, (2) to develop skills and behaviors for healthy living, and (3) maintain partnerships within the community to support healthy living. The following activities are highlighted in this section:

Health Education

Health Education (HE) is the process of assisting individuals and groups to make informed decisions and build skills on matters affecting personal, family and community health. Health Education provides information about awareness and prevention and spans the gap of knowledge between the consumer and the scientific community. All local health departments (LHDs) are required to provide health education services.

2018 Outcomes
- 6,339 individuals received some form of health education.
- 686 individuals received fresh produce and education through the Veggie Wheels Program

School Age Programming
Changing unhealthy behaviors and practices is most effective with young individuals. Research has shown that the majority of an individual's adult behavior and attitudes are shaped as children. Consequently, Health Education has focused much of its effort working with the school age population, or with parents of school age population to promote healthier behaviors and lifestyles. HE reorganized its efforts to share responsibilities, dividing work amongst all department divisions. Head Start’s Cavity Free Kids Program was taught to WIC staff, now trained to educate and provide dental supplies to families and/or children in need. Head Start staff are filling Dental Program requests at schools and community events.
Oral Hygiene Program
The importance of establishing good oral hygiene behavior in childhood cannot be underestimated. With the growth of adult teeth in early childhood, prevention of oral/dental diseases such as periodontal disease, gingivitis and tooth decay becomes the only way to insure nominal dental health. Without good oral hygiene, many children begin the long, painful, path towards oral and dental problems. Historically, rural areas such as Cattaraugus County have had limited access to the types of treatment available to treat these problems. Treatment cost makes prevention more important than ever. In Cattaraugus County, many children lack the necessary tools, toothbrushes, paste, and dental floss, to help prevent tooth decay and combat oral/dental diseases.

Dental supplies are disseminated at Medicaid Obstetrical and Maternal Services (MOMS) visits by Maternal Child Health Nurses, to WIC participants, to Department of Social Services clients, and to Veggie Wheels participants. The population to dental provider ratio is 2,430:1 in Cattaraugus County which is far more than the population to dental provider ratio of New York State which is 1,240:1 as per the 2018 County Health Rankings.

Reproductive Health Program
The reproductive health program seeks not to just educate teenagers and adults about human reproduction, but also to give them the personal skills, sense of personal identity and confidence to make responsible choices regarding their own reproductive decisions. Objectives of the reproductive health program include:

- reduce adolescent pregnancies
- reduce sexually transmitted infections
- increase awareness of other CCHD reproductive health services
- increase personal knowledge of reproductive health

In support of these objectives, Health Education continued to provide innovative program activities designed to empower teens and young adults through self-discovery. In the past three years, the opportunity for programs in the County Jail became available. Classes are popular with both males and females. Topics include contraception, Sexually Transmitted Infections (STI), birth spacing, and relationship skills. Inmates are additionally provided with information on how to access Health Department Family Planning Clinics. In 2018, 650 inmates attended classes.
School and Community Outreach
Programming in schools is designed to educate students about puberty, teen issues, and the science of reproduction. Students also learn potential consequences associated with sexual activity; for all ages, this education provides insight into sociological factors associated with such activity.

STI prevention and Contraception education are provided to numerous individuals with learning and developmental disorders through Alternative Education Schools and adult programs; adult programs include those living in temporary housing, those followed by Directions in Independent Living, and those receiving services at alcohol and/or other drug counseling centers. In 2018, 350 residents served in this program in 2018.

Table 6 provides a summary of 2018 activities. The Educator continues facilitation of the County’s Youth Development Coalition (YDC) which helps sponsor activities during the year that focus on independent living skills.

Table 6 2018 Health Education Activities

<table>
<thead>
<tr>
<th>Program</th>
<th>Locations</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships</td>
<td>County Jail, Randolph Middle and High Schools, Gowanda Middle School</td>
<td>305</td>
</tr>
<tr>
<td>Puberty</td>
<td>Allegany-Limestone Middle School, Gowanda Middle School, Randolph Middle and High Schools, Franklinville Middle School, Salamanca Elementary and Middle Schools, Cattaraugus-Little Valley Middle School, Olean Recreation Center, West Valley Middle School</td>
<td>1371</td>
</tr>
<tr>
<td>Society</td>
<td>Gowanda Middle and High Schools, CA BOCES, Cattaraugus-Little Valley High School</td>
<td>360</td>
</tr>
<tr>
<td>Contraception</td>
<td>Olean Middle School, Salamanca High School, Healthy Families, County Jail, Cuba</td>
<td>348</td>
</tr>
<tr>
<td>Birth Control</td>
<td>Olean Middle School, County Jail, CA BOCES</td>
<td>191</td>
</tr>
<tr>
<td>Fetal Alcohol Syndrome</td>
<td>Cuba Big Picture, Randolph Middle and High Schools, Hinsdale Middle and High School, County Jail</td>
<td>332</td>
</tr>
<tr>
<td>I Dare You</td>
<td>Gowanda High School</td>
<td>34</td>
</tr>
<tr>
<td>HLCC</td>
<td>Healthy Livable Communities Consortium Adults</td>
<td>70</td>
</tr>
<tr>
<td>Taste of Independence</td>
<td>CA BOCES, Olean High School, Allegany Recreation Center, Salamanca High School</td>
<td>121</td>
</tr>
<tr>
<td>Mini Lock-in</td>
<td>All County Elementary Schools, Allegany Recreation Center, Ellicottville High School</td>
<td>99</td>
</tr>
<tr>
<td>Culture</td>
<td>County Jail</td>
<td>19</td>
</tr>
<tr>
<td>Good Bad Ugly</td>
<td>Ellicottville High School, Olean Middle School, CA BOCES</td>
<td>172</td>
</tr>
<tr>
<td>Media</td>
<td>Hinsdale Middle and High Schools, County Jail</td>
<td>67</td>
</tr>
<tr>
<td>Sexting</td>
<td>Olean Middle School, Gowanda High School, Cuba Big Picture, Randolph Middle and High Schools, CA BOCES, County Jail</td>
<td>487</td>
</tr>
<tr>
<td>Hygiene</td>
<td>Gowanda Middle and High Schools, Ellicottville CSD, Hinsdale Middle School, Randolph Academy, Randolph Middle School, IJN Middle School</td>
<td>325</td>
</tr>
</tbody>
</table>
### Adult and Community Based Programming

Staff provide community based programming in an effort to foster healthier lifestyles at various locations throughout the county. Participation includes: Cattaraugus County Employee & Retiree Wellness Days, the YMCA’s Annual Healthy Kids Day, the weeklong Cattaraugus County Fair Booth, Influenza and Rabies Clinics, School Health and Wellness Days, Salamanca Kiwanis Annual Bike Rodeo, the Rehabilitation Center / the City of Olean/ Cattaraugus Community Action/ Seneca Allegany Casino, and Holiday Valley Employee Wellness Days, the Annual Department of Aging Senior Forum, Genesis House Agency Fair, and the Annual Farmer Neighbor Event.
Nutritional Program

Proper nutrition is the foundation of a healthy lifestyle. Obesity is the leading cause of many health related conditions in the U.S. In Cattaraugus County, the obesity rates are (38.6%) amongst adults and (33.5%) amongst children which is relatively high when compared to NYS obesity rates which are (25.5%) amongst adults and (32.2%) amongst children, according to the 2016 NYS Expanded Behavioral Risk Factor Surveillance System (eBRFSS) report. The nutritional program strives to educate the community on good nutrition and healthier behaviors. Staff put on demonstrations that show the importance of portion control, making smarter choices when eating out, growing or buying healthier foods, and encouraging physical activity to control weight.

The consumption of sugary beverages has been shown to affect the rate of obesity. In Cattaraugus County the percentage of adults consuming sugary beverages is 31.3%, which is much higher than NYS which is 23.3% (source?). One of the department’s strategic plan focus areas include **reducing the amount of sugar-sweetened beverages, including juices, consumed by children and adults with emphasis on increasing the amount of water consumed.** Sugary sweetened beverage education is incorporated into all displays, and at health and wellness days. Several posters created by staff, were shared on social media, with the consortium, and at participating vendor events.

Using the health belief model, HE developed a campaign focusing on the importance of limiting consumption of juice for children ages 0 – 5. HE partnered with Early Head Start to complete a 10 week health promotion campaign. Once the materials were finalized, **home visitors** shared and reviewed educational materials with families. **Figures 12 and 13** are examples of materials included in the campaign.

**Figure 12**

![Image of a child drinking water]

**Figure 13**

Did you know, even though I am little I can still get cavities??

Here are some tips to help prevent baby bottle rot and tooth decay:

- It can be hard to see if teeth are budding, wipe your child’s gums with a wash cloth after feeding.
- As soon as your baby gets her first tooth, brush it twice a day with a toothbrush and toothpaste.
- If your baby can’t brush each meal offer your baby water to rinse away any food that may have gotten stuck — quick and easy.
- Start a bedtime routine that includes brushing teeth, even if your baby only has two teeth.
- If your baby is 1 year old or more, and he needs a bottle to go to bed, fill it with water.

Keeping baby teeth healthy will keep adult teeth healthy too.
**Veggie Wheels Program**

The Veggie Wheels Program was launched in 2015 as a response to the high rate of obesity in Cattaraugus County.

Significant additions and changes were made to the Veggie Wheels Program in 2018, formerly known as the Veggie Mobile.

Veggie Wheels has a distinctive logo, designed by a resident of the Olean Housing Authority. Veggie Wheels and its logo are now registered and trademarked.

Thanks to a generous donor, Veggie Wheels was able to establish an Endowed Fund with the Cattaraugus Region Community Foundation — thus increasing the program’s sustainability.

For the first time in 2018, residents at both the Olean and Salamanca sites volunteered with the weekly publicity and distribution of the fresh produce. In total, 20 volunteers participated in the 2018 Veggie Wheels program, distributing produce from three local farmers, as well as, plants for container gardens from a local greenhouse.

Hillview Manor, a government housing complex for low-income elderly and disabled in Salamanca was added as a site in 2018. Of the six sites served by the Veggie Wheels (four in Olean; two in Salamanca), there were a total of 686 individuals participating in the program, of which were 310 children and 376 adults, (111 who are elderly and/or disabled). Approximately 20 to 25 percent of the residents within the government housing complexes participated in the Veggie Wheels Program during the summer of 2018.

As in previous years, residents appreciated the fresh vegetables and fruit, recipes, cooking demonstrations, and activities with the children. A nutritionist from Cornell Cooperative’s Eat Smart New York program, partnered with Veggie Wheels to help provide nutritional education and food demonstrations.

Since a base of resident volunteers has been established, further discussions with those residents at the various sites will enable the Veggie Wheels to develop needed and requested health-related sessions at the housing sites during the fall, winter, and early spring. There continues to be a need to expand to more remote and food insecure regions of the county. Efforts will be made to procure a suitable Veggie Wheels vehicle, equipped for cold storage that can be driven to these areas.
Mobilize community partnerships to identify and solve health problems.

**Introduction:** Essential Service 4 involves convening and facilitating community groups in undertaking defined preventive and population focused activities in order to capture the full range of potential resources to solve community health problems. Highlighted in this section are: The Healthy Livable Communities Consortium, Immunization Coalition, and the Lead (Pb) Smart Partnership, and the Youth Development Coalition.

**Cattaraugus County Healthy Livable Communities Consortium**

In 2018, the Cattaraugus County Health Department continued to partner with multiple agencies and organizations (Table 7) to help better the health of the community.

The **Cattaraugus County Healthy Livable Communities Consortium** (HLCC) formed as a *call to action* in 2011. It continues to take strides toward creation of healthier, sustainable lifestyle opportunities for residents. The Consortium meets quarterly with sub groups meeting more frequently.

Since initiation of the HLCC, it has been the intent of the Cattaraugus County Health Department and its partners to instill upon key stakeholders that we are *all called to action* to tackle health issues. The Community Health Assessment (CHA), the Community Services Plan (CSP), and the Community Health Improvement Plan (CHIP) are facilitated through the Consortium.

In 2018, HLCC expanded its work on the national grant Spreading Community Accelerators through Learning and Evaluation (SCALE), sponsored by Robert Wood Johnson Foundation (one of only 20 national SCALE grants awarded). The SCALE project focuses on an intensive *learning and doing* program whose goal is to create and support local leaders at all levels to be successful within communities, creating *bright spot* interventions. This model is being demonstrated regionally in 8 counties through the WNY Public Health Alliance, integrating regionally evidence base programs through the 2019-2021 CHA.
Funds from the SCALE grant were used to support two regional Community Health Improvement Learning Academies (CHILA). Attendees were offered several opportunities throughout a daylong event to learn community of solution skills. Community Based Organizations (CBO) were invited to attend, health department representatives who attended the first CHILA used what they learned to train representatives from the CBOs in attendance.

In 2018, the HLCC expanded its work on the national grant Reaching People with Disabilities through Healthy Communities funded by the National Association of Chronic Disease Directors (NACDD), which was initially awarded in 2016. The goal of this program is to seek community collaboration to accelerate disability inclusion policy, systems, and environmental (PSE) improvements that will increase opportunities for healthy eating, physical activity, and the prevention of tobacco use for people living with disabilities. In 2018, the NACDD Health Equity Team funded six Wheelchair Charging Stations: two in Allegany State Park, and two each in the Cities of Olean and Salamanca.

**Immunization Coalition**

The **South Western Immunization Coalition of NY** (SWIC of NY) works in collaboration with the New York State Department of Health to increase immunization rates in children and adults. SWIC of NY combines the efforts of Cattaraugus, Chautauqua, and Allegany counties to promote education, information, and access to immunizations for the residents of southwestern NY. The adult immunization rates such as influenza, pneumonia, shingles, and cervical cancer, is low across the United States, and the SWIC of NY has been focusing on improving vaccination rates in adults in the three partnering counties. SWIC is also encouraging healthcare providers who administer adult vaccines to use the New York State Immunization Information System (NYSIIS) to track immunizations. NYSIIS is an electronic immunization registry that any enrolled provider can access to assess the immunization needs of their patients.
Lead(Pb)Smart Partnership

The housing stock in Cattaraugus County is the second oldest in New York State; 66% of the housing stock was built before 1978. Lead-based paint and lead contaminated dust are common sources of lead exposure for children and are often associated with the type of housing available in Cattaraugus County. Prevalence of elevated blood lead levels in Cattaraugus County among children less than 6 years of age is 15.6 per 1000 which is significantly higher than the New York State rate of 5.1 per 1000. Elevated blood lead level testing for children ages one (63.3%) and two (59%) across Cattaraugus County is lower than the NYS rate for 75% for both one and two year olds (eBRFSS). To combat the prevalence of preventable lead poisoning in children who reside in Cattaraugus County, the CCHD has organized a Southern Tier Lead Coalition, called The Lead (Pb) Smart Partnership (PbSP).

The partnership seeks to promote lead poisoning prevention at the community level. The partnership’s goals are to increase lead testing rates among one and two year old children, increase the number of lead safe housing policies, and to educate the community about lead poisoning and prevention.

The PbSP is a regional lead poisoning prevention coalition that includes the Cattaraugus County Health Department, Allegany County Department of Health, the Seneca Nation Health Care System, Cattaraugus and Wyoming Project Head Start, Southern Tier Health Care System, Rural Revitalization Corporation, Parent Education Program, the City of Olean, the City of Salamanca, and Universal Primary Care (Federally Qualified Health Center). Representatives from the New York State Department of Health regional office and from the Regional Lead Resource Center also attend the quarterly meetings to help guide the coalition.

In 2018, the PbSP completed the following activities to help increase lead testing rates and spread awareness about the dangers of lead poisoning:

- Advocated for increased lead testing and lead awareness through doctor’s office visits and community education at WIC/Head Start and community events.
- Advocated for improved housing codes.
- Paint can project to promote lead awareness at paint and hardware stores.
- Worked to get grant sponsored and privately sponsored EPA Certified Lead Renovator trainings to the area thereby training 39 individuals and firms.
Youth Development Coalition

The Cattaraugus County Health Department leads the Youth Development Coalition (YDC). The Coalition partners with the Allegany Recreation and Parks Department, Brookshire Farms, Catholic Charities, Cattaraugus Community Action, Council on Addiction Recovery Services (CAReS), Housing Options Made Easy, and The Rehab Center to promote the practice of positive youth development in order to educate, encourage and empower the youth of the county. All programs offered through YDC are free for both youth and adults. Two popular programs hosted by YDC include the Taste of Independence and the Lemonade Stand.

In 2018, the Taste Independence was offered six times. This one-day program gives participants the opportunity to experience life responsibilities that are associated with being an independent adult, including interviewing for a job, obtaining housing and transportation, purchasing groceries and household furnishings, etc. 120 youth ages 13 – 19 from school districts throughout Cattaraugus County participated in these events. At the conclusion of the day’s events, participants learn that good decision making is the key to success.

In 2018, the Lemonade Stand was offered once during the year. One hundred eighteen (118) youth ages 9 - 13 from school districts throughout Cattaraugus County participated in this event. Lemonade Stand is a week long program supported by the Mayor of Allegany along with the Allegany Fire and Police Departments. The program helps children to learn team work, business development and management. In 2018, 19 lemonade stands were set up throughout the Town of Allegany.
### Table 7

<table>
<thead>
<tr>
<th>Agency/ Organization</th>
<th>Agency/ Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegany-Cattaraugus Cancer Services Program</td>
<td>Housing Options</td>
</tr>
<tr>
<td>Alzheimer’s Association of WNY</td>
<td>Interfaith Caregivers</td>
</tr>
<tr>
<td>American Cancer Society</td>
<td>Kidney Foundation of WNY</td>
</tr>
<tr>
<td>Ardent Solutions Network</td>
<td>Legal Assistance of WNY</td>
</tr>
<tr>
<td>Baby &amp; Me, Tobacco-Free Program</td>
<td>Municipal Clerks</td>
</tr>
<tr>
<td>Boundless Connections/ Strength Solutions</td>
<td>NY Connects</td>
</tr>
<tr>
<td>Canticle Farm</td>
<td>NYS Department of Health</td>
</tr>
<tr>
<td>CARes (Council on Addiction Recovery Services)</td>
<td>NYS Health Foundation</td>
</tr>
<tr>
<td>Catholic Charities</td>
<td>NYS Senate</td>
</tr>
<tr>
<td>Cattaraugus-Allegany BOCES (Board of Cooperative Educational Services)</td>
<td>NYS Smokers Quitline</td>
</tr>
<tr>
<td>Cattaraugus Community Action</td>
<td>Olean City Schools</td>
</tr>
<tr>
<td>Cattaraugus County Board of Health</td>
<td>Olean General Hospital/ Upper Allegany Health System/ Kaleida Health</td>
</tr>
<tr>
<td>Cattaraugus County Community Services</td>
<td>Olean Housing Authority</td>
</tr>
<tr>
<td>Cattaraugus County Department of Aging</td>
<td>Olean Medical Group</td>
</tr>
<tr>
<td>Cattaraugus County Economic Development</td>
<td>Olean Times Herald</td>
</tr>
<tr>
<td>Cattaraugus County Health Department</td>
<td>Olean YMCA</td>
</tr>
<tr>
<td>Cattaraugus County Legislators</td>
<td>Population Health Collaborative of WNY</td>
</tr>
<tr>
<td>Cattaraugus County Department of Social Services</td>
<td>Pfeiffer Nature Center</td>
</tr>
<tr>
<td>Cattaraugus County Veterans Services</td>
<td>Reality Check Program</td>
</tr>
<tr>
<td>Cattaraugus County Youth Bureau</td>
<td>ReHab Center</td>
</tr>
<tr>
<td>Cattaraugus Regional Community Foundation</td>
<td>Rural Revitalization</td>
</tr>
<tr>
<td>City of Olean (Mayor, Planner, Youth Bureau)</td>
<td>Salamanca Press</td>
</tr>
<tr>
<td>Chautauqua County Health Network</td>
<td>SNI (Seneca Nation Indians) Health, Ed &amp; Planning</td>
</tr>
<tr>
<td>City of Salamanca (Council, Youth Bureau)</td>
<td>Southern Tier Health Care System</td>
</tr>
<tr>
<td>Cornell Cooperative Extension Cattaraugus County</td>
<td>Southern Tier West/ Fresh Local WNY</td>
</tr>
<tr>
<td>Creating Healthy Schools and Communities</td>
<td>St. Bonaventure University</td>
</tr>
<tr>
<td>Directions in Independent Living</td>
<td>STRAWW (So Tier Recovery Activities w/out Walls)</td>
</tr>
<tr>
<td>Eat Smart New York</td>
<td>Suicide Prevention Coalition</td>
</tr>
<tr>
<td>Fidelis Care</td>
<td>Tap Into Greater Olean</td>
</tr>
<tr>
<td>Genesis House</td>
<td>Tobacco-Free CCA</td>
</tr>
<tr>
<td>GOAC (Greater Olean Area Churches)</td>
<td>Total Senior Care</td>
</tr>
<tr>
<td>Gowanda School District</td>
<td>United Way of Cattaraugus County</td>
</tr>
<tr>
<td>Head Start Program</td>
<td>Univera</td>
</tr>
<tr>
<td>Health Care Access Coalition</td>
<td>University Primary Care</td>
</tr>
<tr>
<td>Healthy Cattaraugus County</td>
<td>Veggie Mobile</td>
</tr>
<tr>
<td>Healthy Community Alliance</td>
<td>Venture Forthe</td>
</tr>
<tr>
<td>Healthy Families</td>
<td>WIC (Women, Infants, Children)</td>
</tr>
<tr>
<td>HomeCare &amp; Hospice</td>
<td>WOGO (Wider Opportunities Greater Olean)</td>
</tr>
<tr>
<td>iCircle</td>
<td>YourCare</td>
</tr>
</tbody>
</table>
Develop policies and plans that support individual and community health efforts.

**Introduction:** Essential Service 5 involves providing leadership for systematic community and state level planning for health improvement; development and tracking of measurable health objectives as a part of continuous quality improvement strategies and development of codes, regulations and legislation to guide the practice of public health. Highlighted in this section are the Board of Health, and the CCHD strategic plan.

**Board of Health**

The Board of Health insures compliance with New York State Public Health Law, the New York State Sanitary Code, and the Sanitary Code of the Cattaraugus County Health District and applicable regulations, through established administration and enforcement procedures, for the continued safety and health of county residents. The Board sets policy for CCHD and provides the department with a roadmap for implementing programs that protect the health of county residents. In addition to these activities, the Board provides information and direction to the Cattaraugus County Legislature regarding public health issues. The Board of Health also serves as a governing body for activities of the nursing division of the department by actively participating on Professional Advisory, Quality Improvement and Record Audit committees. In 2018, the Board of Health took enforcement actions on 12 cases with one appeal. Numbers only tell part of the story. Decisions made by the Board of Health have supported its strong leadership on issues related to public health. Table 8 illustrates the actions taken by the Board of Health in 2018.

**Board of Health Members**

- Joseph Bohan, MD, President
- Giles Hamlin, MD, Vice-President
- Zahid Chohan, MD
- Sondra Fox, RN, MSN, C.S.
- Richard Haberer
- Kathryn Cooney Thrush, NP, MSN
- Theresa Raftis
- David L. Smith, Mayor
- James Snyder, Legislator Chairman
Table 8

<table>
<thead>
<tr>
<th>Date</th>
<th>Board of Health Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 2018</td>
<td>Approved 2018 Clinic Fee Schedule.</td>
</tr>
<tr>
<td></td>
<td>Approved write off of uncollected debt.</td>
</tr>
<tr>
<td>April 2018</td>
<td>Approved Food Service Policy 1 – Assignment of Risk Categories for Food Service Establishments.</td>
</tr>
<tr>
<td></td>
<td>Approved Onsite Waste Water Treatment System Policy 01 – Use of Previously Abandoned Waste Water Treatment Systems.</td>
</tr>
<tr>
<td></td>
<td>Approved Onsite Waste Water Treatment System Policy 01- Minimum Lot Size Requirement for Onsite Waste Water Treatment Permits</td>
</tr>
<tr>
<td></td>
<td>Approved the request to renew credentialing certification for four medical personnel working for the Health Department.</td>
</tr>
<tr>
<td>June 2018</td>
<td>BOH requested recommendations for restricting the use of liquid nitrogen during food preparations, especially serving a novelty treat called “Dragon's Breath”, a cereal that is cooled rapidly with liquid nitrogen. Ingestion of this product can cause severe damage to the stomach and intestines.</td>
</tr>
<tr>
<td></td>
<td>BOH accepted the CCHD 2018 -2021 Strategic Plan.</td>
</tr>
<tr>
<td>August 2018</td>
<td>BOH voted to require that all food vendors using liquid nitrogen at their facility or at an event where liquid nitrogen is used on food, provide a detailed Hazard Analysis Critical Control Point Plan prior to the Health Department issuance of a permit.</td>
</tr>
<tr>
<td>September 2018</td>
<td>BOH sent a correspondence to Governor Cuomo in opposition of the legalization of regulated marijuana. Copies were sent to county legislators, NYSAC, NYSACHO, local media, Senator Kathy Young, Assemblyman Joe Gigilio, Health Commissioner Dr. Howard Zucker, and school board associations.</td>
</tr>
<tr>
<td>October 2018</td>
<td>BOH voted to approve the surrendering of the operating certificate for the Long Term Home Health Care Program.</td>
</tr>
<tr>
<td></td>
<td>BOH voted to approve the renewal of the Clean Indoor Air Act waivers for the Ischua Fire Department and the Little Valley Volunteer Fire Department.</td>
</tr>
<tr>
<td>December 2018</td>
<td>BOH voted to approve the submission of the 2016-2018 Community Health Improvement Plan’s Progress Report to New York State Department of Health.</td>
</tr>
<tr>
<td></td>
<td>BOH voted to approve the 2018-2021 Strategic Plan Progress Report.</td>
</tr>
</tbody>
</table>

Standing from left to right: Giles Hamlin, MD, Sondra Fox, RN, MSN, C.S, Mayor David Smith, Kathryn Cooney Thrush, NP, MSN, James Snyder, Theresa Raftis, Joseph Bohan, MD, Richard Haberer, Not pictured: Zahid Chohan, MD
In 2018, the CCHD adopted a new Strategic Plan and began its implementation. The new plan has six goals, each goal has several strategic objectives: Goal 1: Prevent Chronic Disease; Goal 2: Promote Mental Health and Prevent Substance Abuse; Goal 3: Improve Visibility and Cultural Relevance of the Health Department; Goal 4: Evaluate and Continuously Improve Processes, Programs, and Interventions through the Use of Performance Management and Quality Improvement Systems; Goal 5: Health Equity; Goal 6: Increase Revenue and Improve Cost Control.

CCHD has made efforts to link the strategic plan with the Community Health Improvement Plan (Goals 1, 2, and 5), Workforce Development Plan (Goals 1, 2, 4, and 6), and Quality Improvement Plan (Goals 4 and 6) as it works toward meeting new accreditation standards.

Strategic objectives within various goals that have an assigned 2018 timeframe were completed.

Increasing community access to fresh fruits and vegetables was identified as a strategic objective within Goal One. The CCHD’s Women, Infants and Children (WIC) Program set a goal to increase the redemption rate of farmer’s market coupons from 49% to 59%. Results of an internal survey showed that 90% of WIC participants redeemed their farmer’s market coupons.

Goal Two has strategic objectives with timeframes that fall outside of 2018, and is on track for completion in 2019 and 2020.

In July 2018, a Health Promotion Committee (HPC) was formed in keeping with strategic objectives identified in Goal Three. The HPC devised a system for tracking outreach activities, and is in the process of updating the department’s brand strategy.

Improving procedures and documentation for investigations of infectious or communicable diseases and non-infectious health problems was identified as a strategic objective for Goal Four. In November 2018, a table top exercise was conducted with participation of staff from Environmental Health, Communicable Disease, and Emergency Preparedness. A scenario was given, staff was asked to respond as if it were an actual event; an after action report was completed.

Implementing socially, culturally and linguistically appropriate health promotion strategies to protect population from preventable health conditions was a strategic objective identified in Goal Five.
The HPC revised the Health Promotion Communication Plan to ensure marketing, communication, and educational materials created by the department are available in alternative formats (large print, languages other than English, accessible to people with low literacy skills, etc.). The HPC created a schedule of health promotion activities focusing on prevention. The schedule will be implemented in 2019.

Goal Six has strategic objectives with timeframes that fall outside of 2018, and is on track for completion in 2019 and 2020.
Enforce laws and regulations that protect health and ensure safety.

**Introduction:** Essential Service 6 involves full enforcement of sanitary codes, especially in the food industry; full protection of drinking water supplies; enforcement of sewage disposal standards; animal rabies vaccination laws, and timely follow-up of nuisance complaints. Highlighted in this section are: the Environmental Health Division’s summary of regulated facility inspections, enforcement activities, nuisances and complaints, along with a summary of actions taken by the Board of Health on enforcement.

**Regulated Inspections**

The field of environmental health seeks to identify those factors present in the environment that either cause or contribute to disease, illness, or unsafe conditions, and prevent such factors from adversely affecting the public. To do this, environmental health relies on the complementary strategies of inspection, education, and regulatory enforcement. Performing inspections to ensure compliance with science based regulatory controls established by state and federal agencies, is a core strategy in most environmental health work performed by the CCHD. Education is equally important in ensuring that county residents understand the potential health risks and mitigation strategies associated with health code violations. Through education and enforcement many potential illnesses and injuries are prevented.

**2018 Outcomes**

- 142 public water supplies were inspected by EH staff.
- 1,602 microbiological samples and 221 nitrate samples were collected at public water systems for analysis by the CCHD’s Laboratory.
- 457 sanitary survey inspections of private sewage and water systems were conducted.
- 170 permits to construct Onsite Wastewater Treatment Systems (OWTS) were issued by EH staff.
- 22 projects (replacement of failing OWTS and/or well water supplies) were completed with funding from the Environmental Health Initiative Program.
- 526 inspections at facilities that prepare and serve food to the public were conducted.
- 193 critical violations were discovered during food establishment inspections.
- 22 routine inspections were completed at temporary residences, this include all hotels, motels, campgrounds, and several facilities which also operate as children’s camps.
- 15 routine inspections were conducted at Children’s Camps.
9 routine inspections were conducted at tattoo shops and salons.

77 Adolescent Tobacco Use Prevention Act compliance checks were conducted at 54 licensed establishments.

44 smoking compliance checks conducted at establishments regulated by the Clean Indoor Air Act.

86 complaints were responded to regarding possible public health issues.

Water Supply Compliance and Protection

Public Water Systems (PWS)

The U.S. Environmental Protection Agency (EPA) cites efficient water use, better management and operation of water systems, full cost pricing, and watershed approaches to source protection as vital to ensuring the future of safe and healthy water for public consumption in the United States. The CCHD's PWS program works with operation and management personnel at 182 public and 11 non-public water systems throughout the county to ensure the provision of safe drinking water. Subpart 5-1, 10 NYCRR classifies public water systems as follows:

*Community Water System (CWS)* - means a public water system which serves at least five service connections used by year-round residents or regularly serves at least 25 year-round residents. Examples are a municipal water district or mobile home park system.

*Noncommunity Water System (NCWS)* - means a public water system that is not a community water system. An example would be a restaurant with less than 25 employees utilizing its own well to provide drinking water to the public.

*Nontransient Noncommunity Water System (NTNC)* - means a public water system that is not a community water system but is a subset of a noncommunity water system that regularly serves at least 25 of the same people, four hours or more per day, four or more days per week, for 26 or more weeks per year. An example would be a school or business facility that has more than 25 employees, with its own well used to provide drinking water.

A non-public water system is one that does not meet the definition of a public water system, and is thus not regulated under Subpart 5-1, but it is still regulated by the CCHD through other sections of state and county sanitary codes. **Figure 14** illustrates the breakdown of CCHD regulated systems by type within the county.
Water System Inspections
During 2018, Environmental Health (EH) staff performed required inspections at 142 public water supplies. A full sanitary survey was performed in accordance with EPA and NYSDOH guidance documents in larger water supplies in which it is required.

Water Quality Monitoring
A key to providing safe and healthy drinking water is routine testing of water quality. Federal and state regulations identify hundreds of potential contaminants and designate a Maximum Contaminant Level (MCL) for each. These potential contaminants are then monitored on a periodic basis by the water supplier. In Cattaraugus County, monthly or quarterly microbiological samples, and annual nitrate samples, are collected directly by CCHD personnel and analyzed in the county lab. In 2018, 1,602 microbiological samples and 221 nitrate samples were collected at public water systems compared to 1,607 microbiological samples and 217 nitrate samples collected in 2017. Numerous other samples were analyzed at commercial labs licensed by NYS.
Wastewater

Properly operating wastewater treatment systems are essential to limit the spread of disease associated with microbiological and viral contamination. Wastewater system performance is dependent upon several factors such as soils, topography and precipitation, design capacity, actual usage, and regular maintenance (i.e. septic tank pumping). EH programs are designed to ensure that all properties not served by a municipal sanitary sewer system, have a properly designed and maintained private onsite wastewater treatment system (OWTS) which meets minimum NYS design standards. Ensuring the proper design and operation of private sewage treatment systems is accomplished through the Real Property Transfer (RPT) and OWTS Permit programs. Together, these two programs account for the largest portion of field staff time each year.

Real Property Transfer Program (RPT)
The RPT program provides a mechanism for performing sanitary survey inspections of private sewage and water systems at the time of all rural property sales. This, along with complaints that are received each year, serve to identify failing OWTS in need of repair or replacement.

Figure 15 shows the number of RPTs completed between 2014 and 2018. Environmental Health staff created the Real Property Transfer Tracking and Reporting System (RPTTRS). The RPTTRS can provide field staff with electronic information directly from Real Property Services, to allow field staff to identify those sales that have not undergone a septic/water sanitary survey. Additionally, management staff can better track the number of such transfers to better allocate workload.

Onsite Wastewater Treatment System Permit Program (OWTS)
To ensure proper functioning of private wastewater systems, each system needs to be designed in conformance with state regulations and with an understanding of environmental conditions unique to each specific site. EH staff routinely conduct site investigations, soil tests, and design small OWTS for individual homes, while the EH Director reviews and approves plans for larger commercial systems designed by professional engineers. Following design, construction, and inspection, EH staff issue permits to operate these systems.
systems. Figure 15 shows the number of OWTS permits to construct issued between 2014 and 2018.

**Environmental Health Initiative Grant Program**

The *Environmental Health Initiative Program* was designed to provide financial assistance to low and moderate income households for the replacement of failing Onsite Wastewater Treatment Systems (OWTS) and well water supplies. In 2016, CCHD was awarded $350,000 to complete new private water and OWTS projects for low-income homeowners over a period of two years. All projects were to be complete by December 14, 2018. In 2018, the EH Division completed 22 projects compared to 13 projects in 2017. Figure 16 shows the breakdown and distribution of projects completed during this grant cycle.
Commercial Sewage Treatment
Larger commercial sewage treatment systems are required to have a State Pollutant Discharge Elimination System (SPDES) permit issued by the New York State Department of Environmental Conservation (NYSDEC) and they require that such systems be inspected annually to ensure proper operation and maintenance. The NYSDEC contracts with the CCHD to conduct these routine annual inspections. In 2018, EH staff performed 114 SPDES compared to 100 SPDES in 2017. All inspection reports were filed with the NYSDEC regional office in Buffalo as required. NYSDEC followed up on any deficiencies reported.

Community / Municipal Sewage Projects
The CCHD also works with municipal boards to promote community wastewater systems where documented Onsite Wastewater Treatment System failures are an issue. Sometimes these efforts span decades.

The Towns of Machias, Olean, and Carrollton all have ongoing projects to improve or replace community sewage systems. All projects are expected to be completed in 2019. The Town of Yorkshire initiated a new engineering study to determine the updated cost and feasibility of constructing a new sewer district to serve the hamlet of Yorkshire Corners.

Permitted Facility Inspections
Proper operation and maintenance of facilities serving the public can minimize disease outbreaks, health risks, and improve the overall quality of life for county residents. EH staff perform routine facility inspections to ensure compliance with regulatory requirements outlined in the NYS and Cattaraugus County sanitary codes. In doing so, EH staff use their education, training, and experience to identify code violations and other conditions which might represent a potential risk to public health and safety. EH staff educate facility operators in best management practices, work with them to achieve compliance with all regulations, and if necessary initiate administrative enforcement actions to compel compliance with minimum standards.

Food Protection Program
This program ensures that all restaurant inspections statewide are standardized. Facilities regulated under this program are subjected to periodic inspections dependent on the type of facility. In 2018, field staff completed 540 inspections during which 193 critical violations were discovered, compared to 570 inspections and 117 critical violations in 2017. Figure 17 compares the number of food service establishments regulated by the CCHD from 2014 through 2018.

In November 2017, the Board of Health passed an ordinance requiring mandatory training of food service managers at all Medium and High Risk food service establishments (FSE). Notification of this requirement was conducted throughout 2018. Permitted establishments were instructed to complete classroom or online training by the beginning of December 2018.
Temporary Residence Program
The EH division permits 52 temporary residences which include all hotels, motels, campgrounds, and several facilities which also operate as children’s camps in the summer within the county. EH staff performed at least one annual inspection of these facilities and follow-up visits as necessary. Inspections may include kitchen operations, public water supply treatment and sampling, onsite sewage disposal system, and swimming pool or bathing beach. In 2018, 22 routine inspections were conducted during which 37 violations were found, which is similar to 2017 which had 23 routine inspections and 37 violations found.

Public Bathing Facility Program
In 2018, the CCHD permitted and oversaw the operation of 60 public bathing facilities operated by 39 organizations (see Figures 18 & 19) for breakdown by type and organization). All aspects of the facility are inspected to ensure public safety; this includes but is not limited to, review of the facility’s safety plan, observation of lifeguard, and testing of the water and filtration system. As part of pool inspections, EH staff continued to notify operators of requirements associated with passage of the federal Virginia Graham Baker Pool and Spa Safety Act, which requires that all public pools nationwide replace existing bottom drain covers with new, approved grates. This legislation was designed to minimize risk associated with suction entrapment.
The CCHD also conducts a bathing beach sampling program to determine when beaches should be closed due to high E. coli bacteria levels. Staff collects samples from 6 beaches, 4 of which are regulated by the health department and two (2) located in Allegany State Park are regulated by New York State. A total of 55 beach samples were collected throughout the summer months, compared to 41 in 2017. NYSDOH closed beaches at Allegany State Park a few times due to elevated E. coli levels and/or turbid conditions following a significant rainstorm event and also due to potential harmful algae blooms.

*The total number of organizations operating facilities is smaller than the total number of facilities because one organization may operate more than one facility*
Cooling Tower Program
Beginning in July 2016, cooling tower owners and operators have been required to comply with Subpart 4-1 of the NYS Sanitary Code - Protection from *Legionella*. Because of the operating characteristics of cooling towers, it creates an optimum environment for *Legionella* bacteria growth and can also cause airborne transmission of the bacteria. Respiration of the airborne bacteria can cause Legionellosis or “Legionnaires Disease”. Under these new regulations cooling tower operators are required to:

- Electronically register their cooling towers on a statewide registry
- Develop and implement an approved maintenance program
- Perform routine inspections, and have their cooling towers inspected and certified annually
- Perform monthly bacteria cultures, and quarterly *Legionella* cultures
- Retain records of all sample results, maintenance, and disinfections during operation.
- Routinely update sample dates, results, disinfections, certification dates, and start up and shut down dates in the NYS automated electronic registry

Notify the local health department within 24 hours of receipt of a *Legionella* culture sample that exceeds 1,000 colony forming units per milliliter

In 2018, there were a total of 19 registered cooling towers, 11 which operated year round, and eight (8) which operated seasonally within the County. EH reviews the cooling tower registry on a monthly basis to determine operator’s compliance with Subpart 4-1 and follows up as necessary. In the event that a cluster of Legionellosis is identified, it would initiate an intensive investigation to determine possible sources, including inspection and review of all nearby cooling towers. Since the program began, there has not been a cluster of cases that would prompt an investigation.

Children’s Camp Program
The CCHD permitted 15 children’s camps in 2018. All of these camps are operated by scouting, religious, or other non-profit organizations. Inspections at these facilities may also include a food service operation, public water supply treatment, on-site sewage disposal system, and swimming pool or bathing beach. Besides annual inspections, staff are required to annually review and approve each camp's written safety plans, investigate any reports of illness or injury, conduct background checks on all camp directors, and verify that required medical and safety certifications are current for all camp staff. In 2018, 15 inspections were conducted during which 27 of violations were found, as compared to 17 inspections and 20 violations found in 2017.
Mobile Home Park Program
The CCHD permitted 34 mobile home parks in 2018. The capacity of the mobile home parks under permit range from a minimum of five homes to over 300 homes. The operations at these facilities also commonly include a community water supply and on-site sewage disposal systems.

In 2018, 32 routine inspections were conducted during which 59 violations were found as compared to 34 inspections and 53 violations found in 2017. Throughout 2018, EH staff had to follow up on numerous complaints regarding sewage systems, water supply systems, electrical issues, and garbage complaints at such parks.

Body Art Program
CCHD regulated 11 tattoo shops located in the county during 2018. The purpose of this program is to prevent infections and the transmission of blood-borne pathogens during tattoo and body piercing procedures. Sterilization equipment at these facilities must be tested on a quarterly basis. In 2018, nine (9) routine inspections were conducted during which six (6) violations were found compared to six (6) inspections and one (1) violation found in 2017.

In 2017, staff began receiving inquiries from persons being trained in the new process of “microblading”. As a result the CCHD now has 4 beauticians and salons under permit which offer this semi-permanent cosmetic tattoo procedure to their customers.

Adolescent Tobacco Use Prevention Act (ATUPA) Program
In September 1992 Article 13-F of the NYSPHL went into effect which prohibited the sale of tobacco products to individuals less than 18 years of age. Since then, the EH division has performed annual visits at 54 establishments in the county licensed to sell tobacco by NYS. The unannounced checks involve the use of minors who attempt to purchase tobacco products at store check-out counters. In 2018, the CCHD performed 77 ATUPA compliance checks during which three (3) sales of tobacco products to a minor occurred compared to 84 checks and again three (3) sales of tobacco products to a minor in 2017 Consequently, formal action was initiated in 2018 which resulted in three (3) violations for $1,050 in fines.

Clean Indoor Air Act (CIAA) Program
The Clean Indoor Air Act was passed to regulate indoor and outdoor smoking as well as to prohibit smoking in all places of employment and restaurants. Similar to the ATUPA program, CCHD conducts unannounced compliance checks to ensure that indoor smoking in public places is not occurring. In 2018, there were 44 smoking compliance checks conducted in establishments around the county, compared to 69 checks in 2017. There were no violations found as a result of these unannounced visits during either year.
Public Health Nuisances
Many environmental health risks are identified through the programmatic activities outlined above. However, county residents themselves often file formal complaints and report potential public health nuisances. In 2018, EH staff responded to 86 complaints regarding possible public health issues. This resulted in 1 formal enforcement action taken to bring about correction of a sanitary code violation.

Data analysis of complaints lodged in 2018 showed that there were three specific trends or patterns regarding complaints.

1. The majority of the garbage, insects and rodents complaints have come from the cities.
2. Most of the mobile home complaints have been related to sewage issues.
3. Almost all of the sewage complaints are from towns.

Garbage, rodent, and insect complaints tend to be centered in the more populated areas of the county; but, are not linked to one particular neighborhood/region and are scattered throughout the cities of Olean and Salamanca. Further analysis showed garbage, rodent, and insect complaints could be attributed to the following factors: affordability of having garbage hauled away; irresponsible tenant and absentee landlord situations, lack of transportation to refuse station; and hoarding. Where there is garbage accumulated rodents and insects are attracted.

Data analysis of sewage complaints from mobile home parks, villages, and towns show that while sewage discharge complaints occur with some frequency, the complaints are not linked to one municipality. This is primarily due to the lack of availability of public sewer systems. Additional factors contributing to the issue are: inability to afford repairs or replacement; lack of information on how to maintain a proper onsite waste water treatment system; and systems greater than 50 years old that have reached the end of their expected service life.
The Board of Health is charged with enforcement of public health law. Fines and penalties are issued if a situation rises to that level. In 2018, there were 38 formal enforcement actions of which 12 required a Board of Health hearing. The remaining 26 were settled without need for a formal hearing. Table 9 is a summary of enforcement actions taken by the Board of Health.

**Table 9**

<table>
<thead>
<tr>
<th>Date</th>
<th>Board of Health Actions on Enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>March 2018</strong></td>
<td>BOH fined a business $350 of the sale of cigarettes to a minor. It was further recommended that a State Certified Tobacco Sales Training Course be offered outside of Olean to accommodate businesses in the northern part of the county.</td>
</tr>
<tr>
<td></td>
<td>BOH fined two residents $150 for failing to provide proof of rabies vaccination after the occurrence of a dog bite.</td>
</tr>
<tr>
<td><strong>May 2018</strong></td>
<td>BOH fined a food establishment $450 after repeat critical violation were found after a repeat inspection. It was also recommended that the restaurant be inspected twice before expiration of the permit. Furthermore, the restaurant owner was required to take a food manager training course and pass the test before 9/30/2018</td>
</tr>
<tr>
<td></td>
<td>BOH fined a resident $75 for failure to produce proof of rabies vaccination after a dog bite.</td>
</tr>
<tr>
<td><strong>June 2018</strong></td>
<td>BOH fined a food establishment $100 for failure submit daily records for the operation of non-community water system for the month of March.</td>
</tr>
<tr>
<td></td>
<td>BOH fined a food establishment $450 after repeat critical violation were found after a repeat inspection. It was further recommended that if repeat violation are found during the next inspection, the restaurant would be forced to close of up to three days.</td>
</tr>
<tr>
<td></td>
<td>BOH fined a food establishment $275 for repeat violations. It was further recommended that the owner take a food manager training course before the permit to operate expires on 9/30/2018.</td>
</tr>
<tr>
<td><strong>August 2018</strong></td>
<td>A resident was fined $250.00 for operating a mobile home park without having a current permit. Previous permit expired on 5/31/2018.</td>
</tr>
<tr>
<td></td>
<td>A resident was fined $75.00 for non-compliance of inadequately treated waste water that was discharging to the ground surface. It was further recommended that a placard be placed on the residence not allowing occupancy if compliance is not met by 8/31/2018.</td>
</tr>
<tr>
<td><strong>September 2018</strong></td>
<td>BOH rescinded a previous order that was issued to a resident in August as new evidence was presented in an appeal proceeding.</td>
</tr>
<tr>
<td></td>
<td>BOH modified a previous order issued in May extending a deadline issued to a food establishment as a special instructor had to be obtained.</td>
</tr>
<tr>
<td><strong>November 2018</strong></td>
<td>BOH fined mobile home park operator $50 for failure to submit complete daily records for the operation of a community water system.</td>
</tr>
</tbody>
</table>
Link people to needed personal health services and assure the provision of care when otherwise available.

Introduction: Essential Service 7 involves assuring effective entry for disadvantaged people into a coordinated system of clinical care; linkage to services for special population groups; ongoing care coordination; targeted health information to high risk population groups and technical assistance for effective worksite health promotion/disease prevention programs. Several program and services are highlighted in this section which include: Clinic Services, Homecare, Maternal Child Health Programs, Early Intervention, Children with Special Health Care Needs/Physically Handicapped Children’s Program, and Woman Infants and Children.

Community Health Clinics

Community health clinics provide a variety of services to community members at health department sites in Machias, Salamanca and Olean. Clinic services may also be provided at various community locations throughout the county in response to critical public health needs. Community Health Clinics provide the following services.

2018 Outcomes

- **116** pap smears were performed, **13** requiring further surveillance with **one (1)** significantly abnormal to require immediate referral for follow-up.
- **15** clients received breast exams
- **40** cases of chlamydia, **10** cases of gonorrhea, and **one (1)** case of syphilis were detected during STI Clinic visits.
- **137** tests for HIV were done in the Family Planning/STI Clinics, with **one (1)** testing positive.
- **151** employment physicals were performed by clinic staff.
Family Planning Clinic (FPC) Services
The goal of family planning services is to assist individuals in determining the number and spacing of births through the provision of affordable, voluntary contraceptive services, supplies, and related preventive health resources to all who want and need them, with priority given to persons from low-income families. Related preventive health services include sexually transmitted infection (STI) education, testing and treatment and cancer screening. Confidential services are available for both men and women at CCHD offices in Machias, Olean, and Salamanca.

In New York, anyone under the age of 18 has the right to consent to services like contraception, testing for sexually transmitted diseases, and reproductive health care without parental consent. Figure 20 shows the number of FPC clients aged 15-19 years old with positive pregnancy tests.

Figure 21 shows the five-year trend for the number of clients and visits to the CCHD family planning clinic. After several years of declining numbers, 2017-2018 showed an increase in both the number of clients and number of visits.
Reproductive Disease Prevention
Cervical cancer is preventable through vaccination and routine screenings. In 2018, Cattaraugus County Family Planning Clinic performed 116 pap smears, 13 requiring further surveillance compared to 93 pap smears in 2017. One case detected in 2018 was significantly abnormal and required immediate referral for follow-up.

Cancer Services Program
The Cancer Service Program assists individuals ages 40 and up who are either underinsured or uninsured to receive health screenings to promote early detection of cervical, breast and colorectal cancer. Family planning staff provides physical examinations, screening & diagnostic tests and education to individuals in this program. In 2018, 15 clients received breast exams and 1 cervical cancer screening compared to 12 breast exams and 9 cervical cancer screenings in 2017.
Sexually Transmitted Infection (STI) Services
CCHD is required by public health law to provide confidential services for the diagnosis and treatment of STIs. Services include testing and treatment for Chlamydia, Gonorrhea, Syphilis, Trichomonas, and Herpes. All clients and identified contacts receive education, treatment and follow-up. In 2018, 40 cases of chlamydia and 10 cases of gonorrhea, and one (1) case of syphilis were detected during STI Clinic visits compared to 17 cases of chlamydia and 12 cases of gonorrhea, and no cases of syphilis in 2017. The increase in cases of chlamydia could be attributed to the fact that most infected people are asymptomatic and lack abnormal physical examination findings. Figure 22 illustrates the number of STI clinic visits by location.

![Figure 22. STI Clinic Visits by Location 2018](image)

Human Immunodeficiency Virus (HIV) Testing Service
Confidential HIV counseling and testing are offered to all individuals utilizing health department clinics. Early detection and treatment enhances quality of life, longevity, and reduces the potential for new cases. The Health Department provides Rapid HIV testing by swabbing the oral mucosa. Using this method, results are available in 20 minutes. In 2018, 137 tests for HIV were done in the Family Planning/STI Clinics, with one (1) testing positive compared to 182 tests and no positive cases in 2017.

The Health Department in Olean provides monthly clinic space to Evergreen Health Services so that HIV positive individuals living in Cattaraugus County and the surrounding areas may receive specialized care in their own community.

Physical Exams
Clinic staff provides routine physical exams for new employees of the county, several villages, towns, fire departments, community businesses, and organizations as well as individuals for school/college admission. In 2018, Health Department staff performed 151 physicals compared to 168 physicals in 2017.
Home Care services in Cattaraugus County are provided through two programs; the Certified Home Health Agency (CHHA) and the Long-Term Home Health Care Program (LTHHCP). The CHHA provides skilled services to individuals of all ages following an acute illness, injury or surgery as well as to individuals with chronic disease. The LTHHCP serves as an alternative to nursing home placement for chronically ill or disabled individuals of all ages that require ongoing assistance with care management and personal care.

2018 Outcomes
- 1,274 individuals were provided care by the CCHD’s Certified and Long Term Home Health Agencies.
- 39 individuals received PRI/SCREEN assessments.
- 13 individuals received a UAS-NY assessment.
- 17 students accompanied the Home Care Nurses on their visits, taking the opportunity to improve their assessment, organizational and communication skills, perform procedures, and teach clients.

Certified Home Health Agency (CHHA)
Home care allows individuals to receive nursing, therapy and aide services in their home where they prefer to be. Individuals with medical conditions that once required treatment in a hospital may now be cared for at home. The care is person-centered and focuses on the return to self-care. Individual goals are achieved through a coordinated effort of the individual, family, physician and home care staff. Examples of skilled care commonly provided in the home setting include intravenous therapy, complex wound care, and rehabilitative therapy services. Home Health Care is covered by Medicare, Medicaid and most private insurance plans. Cattaraugus County CHHA provides care at no or reduced fee to individuals in need of skilled care, who are uninsured and meet income guidelines.

In 2018, Cattaraugus County Health Department’s Certified Health agency provided care to 1,274 individuals with an average daily census of 281 compared to 1,415 individuals with an average daily census of 299 in 2017. Figures 23 and 24 illustrate a breakdown of home visits by discipline occurring in 2018. Figure 25 illustrates the total number of visits across all disciplines for both CHHA and LTHHCP.
Long Term Home Health Care Program (LTHHCP)
Since 1978, the Long Term Home Health Care Program has assisted elderly, disabled and chronically ill individuals, who otherwise might be in a nursing home, to remain safely in the community. Services provided included case management, nursing, therapy, aides, respite, home delivered meals, personal emergency response systems, electronic medication dispenser and social daycare.

Care provided to individuals over an extended length of time, whether in the community, such as with the LTHHCP, or a facility such as a nursing home, is most often covered by Medicaid. New York State’s Medicaid redesign initiative has essentially eliminated the need for the county’s LTHHCP by shifting this type of care to other programs and provider types, including the county’s CHHA. Subsequently, no new patients were admitted to the LTHHCP in 2018 and the remaining two patients were transitioned to other services. Closure of this program is planned for 2019 under the guidance of the New York State Department of Health (NYSDOH).

Figure 23. CHHA & LTHHCP Visits by Discipline
Figure 24. Total CHHA & LTHHCP Visits by Discipline

Figure 25. Total CHHA & LTHHCP visits
Quality Assessment/Assurance and Performance Improvement (QAPI)

Quality health care for people receiving home health services is a high priority for CCHD. QAPI is a process used to achieve positive results for our patients and agency. The process helps identify factors that contribute to a desired outcome and how those factors can be maintained, improved or strengthened. Home Health Quality Measures are derived from clinical and functional data collected by nurses and therapists, Medicare claims data, and patient satisfaction surveys. Some examples include:

- **Improvement measures**
  Example: after receiving home health care, can the person walk better?

- **Potentially avoidable events (PAE)**
  Example: did the person experience a fall while receiving home health care?

- **Utilization measures**
  Example: was the person seen in the emergency department while receiving home health care?

- **Process measures**
  Example: does the home health agency use specific evidence-based processes of care, such as timely admission or assessing patients for depression?

A detailed report of our quality data may be viewed at [https://www.medicare.gov/homehealthcompare/profile.html#profTab=0&ID=337004&cmprID=337004&loc=14760&lat=42.1000383&lng=-78.4069732](https://www.medicare.gov/homehealthcompare/profile.html#profTab=0&ID=337004&cmprID=337004&loc=14760&lat=42.1000383&lng=-78.4069732)

Achievement of positive outcomes is associated with improvement in the quality of life for the individual and for informal caregivers as well as lessens the need for more expensive forms of health care, making home care a valued component of health care in Cattaraugus County.

Patient Evaluation and Assessment

Patient evaluation and assessment, using standardized, objective assessment tools, is essential to ensure individuals receive the appropriate level of care in the appropriate setting. The Patient Review Instrument and Long Term Care Patient Screening Instrument (PRI/SCREEN) and the Uniform Assessment System for New York State (UAS-NY) are examples of commonly used assessment tools.

**PRI-SCREEN**

New York State requires that all individuals be assessed using (PRI) and SCREEN prior to admission to a Skilled Nursing Facility. PRI and SCREEN results help families and professionals determine the correct level of care between staying home with services, assisted living, memory care, enhanced assisted living and nursing home. CCHD has five nurses trained to conduct PRI and SCREEN assessments. In 2018, PRI and SCREEN assessments were conducted on 39 individuals compared to 29 individuals in 2017.
UAS-NY
The online (UAS-NY) is utilized to determine if an individual can be effectively and safely cared for by a long-term community-based home health care program, such as the Traumatic Brain Injury (TBI) or Managed Long Term Care (MLTC) program. Five UAS-NY trained CCHD nurses completed 13 assessments in 2018, the same number of assessment were conducted in 2017.

Clinical Site Rotations
CCHD’s Nursing Division provides Jamestown Community College nursing students with an introduction to the concepts of home and community based health services. In 2018, seventeen (17) students participated in the program. Students accompanied the Health Department nurses on their visits, taking the opportunity to improve their assessment, organizational and communication skills, perform procedures, and teach clients.

Maternal Child Health

Cattaraugus County Health Department provides many services that promote the health of pregnant women, infants, children and families. Education and prevention provide the framework to build healthy family units where each child can grow to meet his/her potential.

2018 Outcomes
- 14 new admissions to the Medicaid Obstetrical and Maternal Services (MOMS) program.
- 35 individuals received 93 visits through the MOMS Program.
- 65 Newborn Screenings were performed by CCHD Nurses.
- 96 individuals received 174 in-home skilled nursing visits by a Maternal Child Health Nurse.

Medicaid Obstetrical and Maternal Services (MOMS)
The New York State Department of Health (NYSDOH) developed the MOMS Program to improve birth outcomes in the high-risk Medicaid population. Through this program, Cattaraugus County assisted 18 individuals without insurance to receive presumptive Medicaid, thus promoting early prenatal care. Nurses, social workers and dieticians provide education and care management services to participants with the goals of decreasing the incidence of premature and low birth weight infants. In 2018, 35 individuals received 93 visits through the MOMS Program which was slightly lower than the visits in 2017 which had 43 individuals receiving 110 visits.
Newborn Services

Newborn Screening
CCHD assists the NYSDOH Wadsworth Lab in obtaining initial and repeat blood samples for newborn screening (NBS). NBS detects over 40 genetic diseases such as cystic fibrosis, phenylketonuria (PKU) and Krabbe Disease. Early diagnosis and medical treatment can prevent serious permanent illness in many cases. In 2018, CCHD nurses performed 65 NBS which was slightly higher than the NBS in 2017 which was 62.

Skilled Home Visits
Skilled nursing visits are provided to pregnant and post-partum women, infants and children following referral by a hospital or physician. A registered nurse develops a home care plan that includes skilled assessments, interventions, education, and reinforcement of positive health behaviors in the individual's own environment. In 2018, 96 individuals received 174 Maternal Child Health visits, similar numbers were reported in 2017.

Early Care

2018 Outcomes
- 224 referrals for children suspected of or diagnosed with a developmental delay were received by intake staff.
- 134 children qualified to receive services and obtained an Individual Family Service Plan.

Identification of and early intervention in the treatment of developmental delays in young children is of paramount importance in improving childhood developmental outcomes. The Early Care Program administers two closely interrelated programs; the Child Find and Early Intervention Programs. These programs address respectively the interrelated issues of identification of and intervention in potential developmental delays in early childhood. These federal programs are administered through the NYSODH and the family’s county of residence. The Early Intervention - Local Early Intervention Coordinating Council (LEICC) conducts periodic meetings to address programmatic issues and to assist in quality control of the program.

In 2018, Intake staff received 224 referrals for children suspected of or diagnosed with a developmental delay, similar to the number of referrals received in 2017 which were 220. Through evaluations provided by NYSDOH approved providers, approximately 134 children qualified to receive services and obtained an Individual Family Service Plan (IFSP) in 2018, slightly higher than the number qualified in 2017 which was 126.

While the Child Find / Early Intervention programs are described separately below, practical administration of these programs does not necessarily recognize this programmatic division.
Child Find Program
The Child Find program identifies children, aged birth to 3 years, that may be at-risk of having a developmental delay and insures that such children are appropriately evaluated and have access to the services necessary to address such issues. The Child Find program assures that all children have a primary health care physician and health insurance, such as Medicaid and/or Child Health Plus. Identification of at-risk children occurs by working with area hospitals to contact families when their infant did not receive or failed a Newborn Hearing Screen or through referrals by family, friends, physicians, hospitals, educational/health care professionals when there is a concern regarding a child's ability to meet developmental milestones.

In efforts to identify more at-risk children, Child Find distributes material containing information on developmental milestones for children aged birth to three years old to physicians, hospitals, educational/health care professionals and other potentially interested parties.

Early Intervention Program
Once identified, children aged birth to 3 years old who are at risk of a developmental delay are evaluated and provided with intervention services through the Early Intervention Program. Children are determined eligible by a multi-disciplinary evaluation which determines eligibility and appropriate therapy. Services provided within this program fall into the following areas: Speech/Language Pathologist, Physical Therapy, Occupational Therapy, Nursing, Special Instruction, Audiology, Nutrition, Social Work, Vision, Psychological, and Assistive Technology devices, Family Training, Respite and Service Coordination Services.
Physically Handicapped Children's Program (PHCP) / Children with Special Health Care Needs Program (CSHCN)

2018 Outcomes

- 31 children received approval for medical care.
- 8 children received orthodontic care.
- 958 medical and orthodontic services were authorized.

The PHC/CSHCN Programs provide services to children from birth to 21 years of age, who have or are suspected of having serious chronic physical or developmental condition requiring health or related services of a type or amount beyond what is typically required by children.

The Children with Special Health Care Needs Program is a referral service that connects families with health care and support services that will help meet the family’s needs.

The Physically Handicapped Children's Program helps to cover the financial costs that arise when caring for a child with special health care needs and is designed to help low and middle income families who have inadequate or no health insurance.

This program has three divisions: First, the Diagnosis and Evaluation Program will provide funding to assist a family obtain a diagnosis for a child who is suspected of having a serious or chronic condition. Families are allowed a maximum of three visits per year under the diagnosis and evaluation division. Once a diagnosis is determined, the second division of CSHCN which is PHCP will provide funding to help cover costs related to that diagnosis. For instance, if a child is diagnosed with diabetes, PHCP will help parents pay for prescriptions, diabetic supplies, and co-pays for the child’s frequent medical visits. Examples of conditions that are considered to be serious or chronic which would be covered by PHCP include but are not limited to: asthma, cystic fibrosis, diabetes, cancer, hearing loss, orthopedic conditions, seizure disorder, et al. The first and second divisions of PHCP are free.

The third division connects families to affordable orthodontic coverage. This is not a free service; parents pay a portion of their child’s treatment based upon their annual income.

Outreach activities are performed quarterly. CSHCN/PHCP staff meets with medical providers, school nurses, and local community resources to inform them of the services that our programs provide. These activities aid in bridging gaps and overcoming barriers that prevent families from having access to adequate health care. The majority of PHCP referrals come from school nurses, local healthcare providers, orthodontists, the Early Intervention Program, and parents whose children have received services from CSHCN or PHCP in the past.
In 2018, there were 38 children enrolled in PHCP which is much lower than the number enrolled in 2017 which was 52. This is could be due to the increase coverage in private health insurance by residents. 31 children received approval for medical care; eight (8) children were approved for orthodontic care in 2018, compared to 38 children approved for medical care and 14 children approved for orthodontic care in 2017. The decrease in children receiving orthodontic care is attributed to the change in criteria that NYSDOH uses to determine if a child qualifies for coverage. It is now more difficult to qualify for orthodontic services through PHCP which is effecting enrollment significantly. In total, 958 medical and orthodontic services were authorized in 2018, compared to 649 in 2017.

Data reporting is forwarded quarterly to the New York State Department of Health’s Family Fiscal Unit, the Bureau of Maternal and Child Health, as well as, New York State’s Regional Office in Buffalo.

### Woman Infants and Children (WIC)

#### 2018 Outcomes
- 1,786 participants on average were enrolled in WIC.
- 6,700 Farmers Market Coupons that were distributed throughout the summer.
- 46.5% of the Farmers Market Coupons distributed were redeemed.
- 74.7% of mothers enrolled in WIC exclusively breastfed while in the hospital.
- 61 breast pumps were distributed by certified lactation councilors.
- 100% of all participants received nutrition education.

The Women, Infants and Children (WIC) program is a federally funded program administered in New York by the NYSDOH through local health departments. The WIC Program serves to safeguard the health of low-income women, infants, and children up to age five who are at nutritional risk by providing nutritious foods to supplement diets, providing information on healthy eating and lifestyles, and making referrals to health care.

#### Supplemental Nutrition Program

Through the supplemental nutrition program, income eligible, pregnant, postpartum and breastfeeding women and infants and children up to age five receive nutritious foods. During 2018, the New York State WIC Program transitioned to an Electronic Benefits Card (EBT) instead of voucher and checks. The process was extremely smooth and participants are reporting very nice transactions at the grocery stores. WIC foods include infant cereal, iron-fortified adult cereal, Vitamin C-rich fruit juice, eggs, milk, cheese, peanut butter, dried and canned beans/peas, canned fish, fruits and vegetables, baby foods and whole grain products.
Staff identifies potential WIC program participants through referrals from other social service agencies, hospitals and physicians, as well as walk-in clients. In 2018, the CCHD WIC Program’s average enrollment was 1,786 which is slightly lower that the average enrollment in 2017 which was 1,812.

In addition to foods, the WIC program offers WIC families Farmer’s Market Coupons that are used at local and seasonal farmer’s markets. This year Cattaraugus County WIC program received 6,700 coupons that were distributed throughout the summer. The most recent data shows that 46.5% of them were redeemed.

**Breastfeeding Promotion and Support Program**

Research has shown that there is no better food than breast milk for a baby’s first year of life. Breastfeeding provides health, nutritional, economic and emotional benefits to mother and baby. Since a major goal of the WIC Program is to improve the nutritional status of infants, WIC mothers are encouraged to breastfeed their infants. WIC has historically promoted breastfeeding to all pregnant women as the optimal infant feeding choice, unless medically contraindicated. In 2018, WIC’s Breastfeeding Promotion and Support Program show that the breastfeeding initiation rates were 74.7% which is significantly higher when compared to the 2017 rate which was 69.8%. Peer counselors continued to link with pregnant and new mothers, visiting new mothers in the hospital for help with initiating breast feeding. In addition, WIC provides hospital-grade electric breast pumps, personal use electric pumps and manual pumps for participants who must be separated from their infants, vital for continuation of breastfeeding as new mothers begin reintroduction to their daily lives outside of the home, both of these factors could be attributed to this increase. In 2018, 61 breast pumps were given to WIC participants, compared to 78 in 2017. Cattaraugus County WIC staff includes three CLCs (Certified Lactation Counselors).

**Nutrition Education Program**

Nutrition education is vital in promoting a healthy start for newborns, infants and young children. The WIC nutrition program provides such education through individual counseling, literature dissemination and through facilitated group discussion.

By allowing participants to discuss their nutritional practices, identify better practices and develop strategies for implementing such practices, there is a greater understanding of the role of good nutrition in living a healthy lifestyle. Recent research has indicated that participants in such programs are more likely to understand the value of good nutrition and change eating behaviors.
Assure competent public and personal health care workforce.

Introduction: Essential Service 8 involves educating and training personnel to meet the needs for public and personal health service; adoption of continuous quality improvement and life-long learning; active partnership with academic institutions. In order to provide the highest quality services, the Health Department strives to ensure that all our staff possesses the knowledge, skills, and abilities necessary to perform their jobs effectively and efficiently. Highlighted in this section is a summary of the department’s partnership with academic institutions and a summary of Workforce Development activities.

2018 Outcomes

- 15 New Vision-Health Professions students were hosted by the Olean Clinic.
- 17 interns from Jamestown Community College’s nursing program shadowed homecare nurses.
- 16 staff from all levels received Quality Improvement training
- 50 staff from all levels received training in Cultural Competency.
- 8 Food Service Inspection Officers attended a New York State Department of Health Food Protection Program Standardization Update.
- 7 WIC staff attended a week long training to implement the eWIC system.
- 20 staff completed four basic courses provided by the Federal Emergency Management Agency (FEMA) on emergency response processes.

Academic Partnerships

Cattaraugus-Allegany BOCES New Vision-Health Professions Program

The New Vision-Health Professions is an elective program for select high school seniors who plan to attend college and major in a health related field. The students shadow several different types of healthcare professionals during the program. The Health Department hosted 15 New Vision-Health Professions students in 2018. These students shadowed nurses in the Olean Clinic for approximately 2 hours. During that time, they were able to observe the duties of a public health nurse. The students had the opportunity to discuss vaccine preventable diseases and observe vaccine administration.
Jamestown Community College
Jamestown Community College (JCC) offers an Associate’s Degree program for nursing. The Health Department hosted 17 interns from JCC in 2018. Students followed homecare nurses based out of the Olean office. Each intern shadows a nurse for one day. With the patient’s permission, interns take vital signs, change wound dressings, and may complete other activities based on the skill level of the intern. This helps the student fulfil a graduation requirement.

Workforce Development

Quality Improvement Training
Sixteen (16) staff from all levels participated in three different Quality Improvement trainings in 2018. The first two trainings focused the Lean Process Improvement technique. The goal of Lean process improvement is to enable teams to systematically find ways to deliver more value to their clients faster. It does this by providing a systematic, scientific approach to practicing continuous improvement as a part of daily work.

The third training was a one-day refresher on the Plan-Do-Study-Act (PDSA) model. PDSA provides a straightforward, iterative approach to quality improvement. The PDSA cycle is shorthand for testing a change—by planning it, trying it, observing the results, and acting on what is learned. This is the scientific method, used for action-oriented learning. One notable take away was in order to achieve continual improvement it must be done through small, incremental changes. Small changes add up and will eventually have a dramatic effect on the overall goal.

Cultural Competency Training
The Millennium Group provided a cultural competency training for 50 CCHD staff. The term cultural competence is used to describe a set of skills, values and principles that acknowledge, respect and work towards optimal interactions between the individual and the various cultural and ethnic groups that an individual might come in contact. At the heart of Cultural competency is effective communication that has as its basis a desire for mutual respect and empathy. The objective of the training was to define key concepts in cultural competency; to identify potential barrier to cultural competency; and to improve the ability to identify cultural biases.
Environmental Health Food Protection Program Standardization Update

In October 2018, Environmental Health Food Service Inspection Officers (FSIO) attended a training hosted by the New York State Department of Health (NYSDOH). NYSDOH staff provided an update on the standardization of the state’s food protection program. The following topics were covered:

- Implementing Risk Based Inspection Techniques
- Grouping of Violations
- Reduced Oxygen Packaging
- Identifying Time-Temperature Control for Safety (TCS) Foods
- Disposition of TCS Foods Found Without Temperature Control
- Assessment of Reheating and Cooling Conditions

The goal of NYSDOH’s food protection program is the reduction and prevention of foodborne illness. By standardizing the inspection process, it ensures that food service establishments are being inspected in the same manner statewide.

eWIC Training

During 2018, the New York State WIC Program transitioned to an Electronic Benefits Card (EBT) system instead of voucher and checks. Three (3) WIC staff attended an intensive 4 day training. The four (4) remaining staff attended a week long training to implement this new system. The training helped the transition process to run smoothly and participants are pleased with the new process reporting that the shopping experience has been greatly improved. Some participants are heard saying, “I love it”.

Incident Command Center Training

The NYS Department of Health’s Office of Health Emergency Preparedness recommends that all local Health Department personnel who may be directly involved in emergency response processes are trained in four basic courses provided by the Federal Emergency Management Agency (FEMA). These include ICS100, IS200, IS700 and IS800.

As of December 2018, 20 CCHD staff have been trained in all these courses.
Evaluate effectiveness, accessibility, and quality of personal and population-based health services.

Introduction: Essential Service 9 calls for ongoing evaluation of health programs to assess program effectiveness and to provide information necessary for allocating resources and shaping programs. Highlighted in this section are the Public Health Accreditation Board (PHAB) standards, and summary Quality Improvement Activities.

Accreditation
The Cattaraugus County Health Department was awarded accreditation status on November 14, 2017 by the Public Health Accreditation Board (PHAB).

The Public Health Accreditation Board (PHAB) is a nonprofit organization dedicated to improving and protecting the health of the public by advancing and ultimately transforming the quality and performance of state, local, tribal, and territorial public health departments. The accreditation process provided a framework for the health department to identify performance improvement opportunities, to improve management, develop leadership, and improve relationships with the community. Since 2014, the Health Department has worked to meet the established set of standards and measures identified by PHAB. The process challenged the department to think about what business it does and how it does that business.

The Health Department must maintain accreditation by continuing to foster a culture of quality within the department. This is accomplished through the implementation of Performance Management and Quality Improvement systems, Strategic Planning, Workforce Development, et al. Community partnerships will continue to be developed in effort to improve public health within Cattaraugus County.
In 2018, CCHD submitted its first annual report to PHAB since becoming accredited. PHAB’s annual report has two sections. Section one highlights action taken on measures PHAB identified as areas of improvement. Section two highlights the continuous improvement of the department highlighting efforts to update and implement the Community Health Assessment, Community Health Improvement Plan, Strategic Plan, and Quality Improvement Plan. The following is a list of some of the strengths identified by PHAB:

Strengths:
- The health department described efforts of making QI training more widely available to all staff.
- The health department has successfully begun aligning the work of its PMQI Committee, CHA/CHIP activities, and agency strategic plan.
- The health department described well planned and organized CHA/CHIP cycles with community partners and stakeholders.
- The alignment of CHA with the hospital IRS required cycles and NYSDOH guidelines, as well as PHAB standards, are leading to goal priorities that overlap with NYS.
- The health department is intentional in forming productive relationships to strengthen informatics capacity via St. Bonaventure.
- Multiple CHIP activities are demonstrating improvements in partnership and collaboration, for example, increased cancer screening rates in some health systems.
- The health department has been an ambassador for PHAB, mentoring others, and sharing lessons learned.
- The health department described innovation in emergency preparedness which has resulted in a more comprehensive approach among key partners.

Quality Improvement
In an effort to continuously improve, the Health Department implemented a Performance Management and Quality Improvement Process. **Six (6)** Quality Improvement projects were implemented in 2018. **Table 10** provides a summary of completed and on-going projects conducted in 2018.
<table>
<thead>
<tr>
<th>Project</th>
<th>Type</th>
<th>Divisions/ Programs</th>
<th>Status</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>Administrative</td>
<td>6 of 8 CCHD Divisions. 43/106 Employees participated</td>
<td>Expansion from 2017</td>
<td>Each division surveys customers to assess level of satisfaction. Surveys are used to identify potential process improvement activities. Overall, 95% of clients are satisfied with Health Department services.</td>
</tr>
<tr>
<td>Seasonal Water Operator Compliance</td>
<td>Programmatic</td>
<td>Environ-mental Health 13 Employees participated</td>
<td>Expansion from 2017</td>
<td>Seasonal business owners/operators are required to disinfect non-municipal water systems prior to opening. In 2016, only 61% were in compliance. In 2017, a QI project was initiated and with an aim of 100% compliance. The completion of the project saw the percentage increased to 89%. An expansion of the project into 2018 saw 97% compliance.</td>
</tr>
<tr>
<td>Lab Billing</td>
<td>Administrative</td>
<td>Lab and Finance 8 Employees participated</td>
<td>New Project</td>
<td>The CCHD’s full service Laboratory’s billing process was in need of an upgrade from a manual process to an automated process. By changing this process it is estimated that it will reduce the time spent by 30% from 18 hours to 12 hours per week.</td>
</tr>
<tr>
<td>Complaints Investigations</td>
<td>Programmatic</td>
<td>Environ-mental Health 13 Employees participated</td>
<td>New Project</td>
<td>Data analysis showed that approximately 24% of all complaints that have been investigated over a four year period have been left open or unresolved. EH Staff is working to resolve this problem and is working to reduce open complaints from 24% to 14% by March of 2019.</td>
</tr>
<tr>
<td>Community Engagement</td>
<td>Programmatic</td>
<td>Early Intervention 6 Employees participated</td>
<td>New Project</td>
<td>Early Intervention (EI) staff is participating in a statewide improvement effort to connect families with community resources and other EI families. EI Staff has chosen to create a closed Facebook group for EI parents. By December 2018, the EI closed Facebook group will have 15 families join. The intention is to provide a place for parents to connect with others. EI staff will share information about community resources, and conduct a needs assessment to learn what types of opportunities parents will utilize within their communities.</td>
</tr>
<tr>
<td>Health Promotion</td>
<td>Programmatic</td>
<td>All 4 Employees participated</td>
<td>New Project</td>
<td>A Health Promotion Committee (HPC) has been formed. All Health Promotion activities conducted across divisions will be reviewed by the HPC to ensure compliance with CCHD’s Health Promotion Plan and Cultural Competency Policy.</td>
</tr>
</tbody>
</table>
Table 10
Research for new insights and innovative solutions to health problems.

**Introduction:** Essential Service 10 includes continuous linkage with appropriate institutions of higher learning and research. Highlighted in this section is a summary of an informatics project that began in partnership with St. Bonaventure University.

**St. Bonaventure University - Informatics**

The Health Department collaborated with St. Bonaventure University to develop an informatics infrastructure that would not only allow analysis of data from the department, but also provide training opportunities in computational analysis for school aged children in the Science, Technology, Engineering, and Math (STEM-C) track. The collaboration began in August 2018, and involved faculty and students from the Biology Department at St. Bonaventure University. The project began with a feasibility study examining communicable disease data for 2017 that was retrieved from the New York State Department of Health electronic surveillance system data base. A software program developed by St. Bonaventure University called QlikView generated a report that showed the ability to zone in on specific cohorts for deeper analytics. The feasibility study showed that machine based analysis did not apply to this data set because there was not sufficient data points for an effective analysis. Therefore it was decided that detailed demographics obtained from the Statewide Planning and Research Cooperative System (SPARCS), [which is a comprehensive data reporting system that collects patient level detail on inpatient and outpatient characteristics, diagnoses and treatments, services, etc.], data will be analyzed using the QlikView program for more granular depth in the analysis of data. The analyzed data will be presented to the Board of Health in April 2019. When the analysis is completed it will be used to help improve the health outcomes in the county’s municipalities. For example, if high rates of sexually transmitted diseases such as, gonorrhea or chlamydia are identified in a specific municipality, the situation can be monitored and if necessary, an intervention can be implemented in real time as opposed to several years later. The health department staff will be trained to use this software to perform analysis on a regular basis.
Financial Report

Finance Division

The Financial Division of the Health Department processes all income, expenditure and payroll activities. The Division also performs purchasing functions and oversees all of the medical billing for the Department. This division is responsible for preparing and submitting reimbursement claims to State and Federal Agencies, and for preparation and subsequent monitoring of the Department’s Annual Budget.

Key to budget preparation and reporting is an understanding of revenue sources and program expenditures. Financial Services works closely with the various programmatic divisions to account for all revenue sources and program expenditures. Total budgeted revenue in 2018 was $11,279,482. Figure 26 provides a breakdown of CCHD revenue sources and Figure 27 provides a similar breakdown for budgeted expenditures.

In 2018 New York State Aid to Local Health Departments consisted of a base grant of $650,000, and partial reimbursement of eligible expenditures (in excess of revenues for eligible services) of 36%. Some services provided by the Health Department do not qualify for reimbursement through New York State Aid. CCHD must complete the State Aid application annually and submit it for approval by the New York State Department of Health.

The Division also processes numerous New York State grant funding streams for programs such as Family Planning, Lead, Drinking Water Enhancement, Adolescent Tobacco Use Prevention, Rabies, and the Early Care Program.

Federal grant funding includes WIC, Immunizations, Emergency Preparedness, Children with Special Health Care Needs, and Well and Septic Replacement. Private grants include Community Health Assessment and Chronic Disease Prevention.
Figure 27. CCHD Expenditures by Division / Program

Total Expenditures (2018) - $11,279,482
The Billing division is primarily responsible for the timely submission of claims and collection of fees owed to the Cattaraugus County Health Department for all health related services. Throughout 2018, billing division staff has processed all bills in accordance with internal controls requiring bills to be sent out by specific deadlines each month. In 2018, the contract with Southern Tier Credit Services was continued, as well as National Collection Services Plus, for the purposes of ensuring all revenue due to the County was collected.

Home Care Billing
In 2018, Home Care services generated over **$5.8 million** in claims to over **100** private insurance companies, Medicare and Traditional Medicaid. Figure 28 illustrates the breakdown of claim payments by type. This total makes home care the largest revenue source for the department.
The Third Party Liability (TPL) project, which is a labor intensive Medicare/Medicaid mandated project that entailed pulling medical records from 2017 services and re-billing them to Medicare for their review and consideration, remains an ongoing project that will continue through 2019. In addition, CMS (Centers for Medicare & Medicaid Services) and OMIG (Office of Medicaid Inspector General) reached an agreement that will produce settlement payments to home health providers that have appeals pending.

**Clinic Billing**

The various nursing division clinics continued to see an increase in the number of patients having third party insurance that are often billed for the services rendered. During the year, insurance reimbursement for clinic services was sought for 1,942 seasonal flu shots, 275 physicals, and 272 post-exposure rabies shots. The Health Department implemented new software through AthenaNet for Clinic services in 2017, however will be transitioning the software to Patagonia Health in 2019.

**Family Planning**

In 2018, the Cattaraugus County Health Department processed third party insurance claims through its medical software called (AthenaNet) for services rendered by the Family Planning clinic to private insurance and also to NYS Medicaid through medical software called (Ahlers). Clinic staff is urged to inform patients with no insurance of the Family Planning Benefit Program, which if eligible, will cover the cost of their Family Planning visits.

**Laboratory Billing**

Laboratory service billing utilized an existing in-house database billing system until October 2018, at which time services were entered into a new business unit in NetSmart (software currently being used for Homecare). This system should better meet billing needs and require less manual entry and result in time saving for everyone. In 2018, the Laboratory generated over $215,000 in clinical claims to Medicare Part B, Medicaid, Private Insurance and various departments throughout the county. In addition, over $105,000 was generated in Water testing.
Early Intervention Billing

In 2018, the Early Intervention program received **224** new referrals. **Figure 29** shows the distribution of insurance coverage by type for the **134** active Early Intervention cases.

New York Early Intervention System (NYEIS) is the State software utilized for all referrals, charting, and billing. Service Coordination is the only EI provider service that is provided by County employees, and billing to NYS for Service Coordination is being done with current staff.
Location and Contact Information

Cattaraugus County Health Department
One Leo Moss Drive
Olean, NY 14760
716-373-8050

Satellite Offices

69 Iroquois Drive
Salamanca
716-945-1230

9824 Route 16
Machias
716-353-8525

207 Rock City Street, Suite 201
Little Valley
716-938-9111