# CUYAHOGA COUNTY BOARD OF HEALTH

YOUR TRUSTED SOURCE FOR PUBLIC HEALTH INFORMATION



2019 ANNUAL REPORT



Since 1900, the average lifespan of those living in the United States has grown by more than 30 years. 25 years of this gain can be attributed to advancements in public health (1).

As Ohio was reeling from the effects of both a statewide smallpox epidemic in 1917 and the global influenza pandemic of 1918, it became clear that a more comprehensive and formalized approach to public health was necessary.

A uniform structure for each health district in the state was established including boards of health, guidelines for potential board members, and the creation of the district advisory council, which appointed the members of the board of health.

The legislation outlined specific duties for each health district:

- · birth and death records
- control and prevention of communicable disease
- · data collection
- food safety
- inspection and abatement of nuisances

Finally, the law called for each district to take "all steps necessary to protect the public's health and to prevent disease."

The Cuyahoga County Board of Health began operating under these renewed guidelines in 1919.

# Immunizations & Vaccines

Vaccination has resulted in the eradication of smallpox, the elimination of poliomyelitis in the Americas, and control of diphtheria, influenza, measles, rubella, tetanus, and other infectious diseases in the United States and around the world (2).

#### Spanish Flu

The influenza pandemic of 1918, also known as the Spanish flu, was the first of two deadly pandemics related to the H1N1 virus.



- > 500 million people infected 27% of the world's population
- > 50-100 million people died
- Life expectancy dropped 12% in 1919 as a result of the pandemic

The severity of the outbreak was kept secret in the early part of 1918 as reports were censored to keep up morale during the war. It became known as Spanish influenza because Spain, which had remained neutral during the war, was the only nation reporting on the illnesses (3).

Most influenza outbreaks disproportionately kill the very young and the very old, with a higher survival rate for those in between, but the Spanish flu pandemic resulted in a higher than expected mortality rate for young adults.

#### H1N1pdm09

In the spring of 2009, a novel influenza A virus, now known as H1N1pdm09, was first detected in the United States before becoming a worldwide pandemic. This new H1N1 virus contained a unique combination of influenza genes that had not been recognized in either animals or people (4).

#### United States 2009-10

- > 60.8 million cases
- > 274,304 hospitalizations
- > 12,469 deaths

#### Worldwide 2009-10

- > 151-575,000 deaths
- > 80% of deaths occurred among people 65 and younger
- Africa and Southeast Asia (38% of the world's population) accounted for 51% of the deaths (5)

#### Surveillance

As a result of our experiences with H1N1, we began to issue weekly reports about local flu activity in 2011. Every year during flu season (October through April), we track hospitalizations, fatalities and other data for our reports, which are posted on our website.



Over 100 years, food protection has evolved from inspections based on general sanitation to an ongoing dialogue with operators about common risk factors as identified by the Centers for Disease Control and Prevention (CDC). Our everyday discussions now revolve around the flow of food, meaning what happens from the time the food enters the door until it is served to a customer.

#### **Important Dates in Food Protection**

- **1938** The Food, Drug and Cosmetic Act Mandates Enforceable Safety Standards
- **1970** CDC Begins Keeping Records about Foodborne Illness
- 1973 First Major Food Recall in U.S.
- **2011** Food Safety Modernization Act (FSMA) Signed Into Law (6)

The introduction of FSMA brought food protection into the 21<sup>st</sup> century. Measures were designed to make us proactive rather than reactive to outbreaks. Tracing of food sources and prevention of intentional contamination were also major focal points (7).

As a way of helping operators prevent illness due to biological, chemical and physical contamination of food, we offer food safety classes throughout the year. Among the instructors in our food protection unit, we have hundreds of years of hands-on experience with facilities, operators and regulations.



#### CCBH By the Numbers: 2019

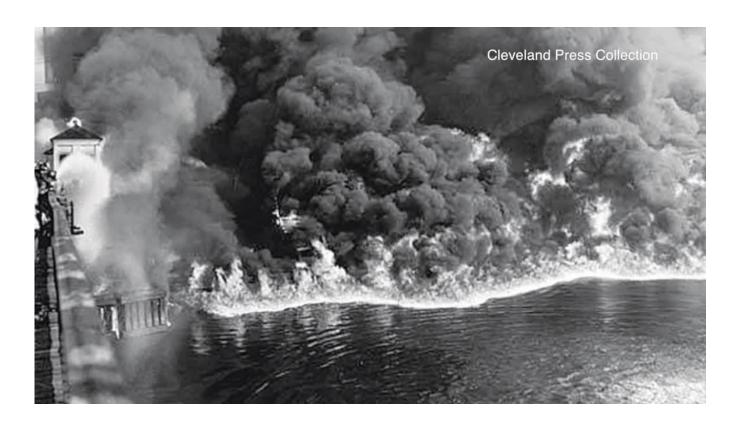
- > 9,700 routine inspections
- Hundreds of re-inspections and responses to complaints
- > 132 temporary event inspections
- > 95 foodborne illness investigations
- 31 food safety education classes taught with 1,333 total attendees

# Clean Water

<u>Dating back to the late 1800s</u>, Lake Erie and the Cuyahoga River had both been dumping spots for untreated sewage. Local sewer systems carried waste to the lake, discharging it there without regard.

Despite the presence of <u>three local wastewater treatment sites</u> by the 1920s, a great deal of damage had already been done to our local waters. Efforts to restore environmental quality were compounded by the challenges of ongoing pollution and a lack of effective regulation. The decades-long struggle <u>eventually culminated with the Cuyahoga River catching fire for the 13<sup>th</sup> time in 1969 (8).</u>

National media coverage quickly fueled legislative efforts that ultimately resulted in passage of the Clean Water Act, the Great Lakes Water Quality Agreement, and the creation of the federal Environmental Protection Agency and the Ohio Environmental Protection Agency (OEPA).



# Household Sewage Treatment

Septic systems began appearing in the United States in the late 19th century. In the 1940s, they became more affordable and more commonplace thanks to the growth of the housing industry following World War II.

Nationwide, many of these systems began to fail during the 1960s. This led to increased regulation and design mandates during the 1970s, including the permitting of new installations by local governments.

In 1993, CCBH launched its <u>Household</u> <u>Sewage program</u> with the intent of helping homeowners, contractors and municipalities coordinate their efforts in preventing future water quality issues.

#### **Local Impacts**

**1976** First Statewide Septic Rules

1977 Septic Rules were revised

**1993** CCBH started Household Sewage Operation and Management Program

**2002** CCBH started permitting and inspecting Sewage Treatment Systems abandonments

**2015** New Sewage Treatment System rules became effective





# **Lead Prevention**

Lead has been a part of everyday life dating back to the times of ancient Rome. It has been added to paint for centuries in order to expedite drying, increase durability, resist moisture damage, and brighten appearance.

Despite being internationally recognized as a health risk in the late 1800s, lead-based paint was not banned in the United States until 1978.

Since it is toxic and affects the development of young children, lead can be hazardous when found in a home environment. It is still present in millions of homes, particularly those built before 1950.

Lead-based paint that is chipping, cracking, peeling or becoming powdery is a hazard and should be addressed right away.

Lead residue can often be found on surfaces such as windows and window sills, doors and door frames, stairs, railings, and porches. It is this residue, or dust, from the paint that can get on a child's toys, clothing or hands and eventually enter their bloodstream.

#### **CCBH Impact**

Our <u>Lead Poisoning Prevention program</u> has received nearly \$33 million in federal funding since 1999 to coordinate the repair of residences affected by lead-based paint. By the end of the grant cycle in 2023, we will have completed remediation on at least 2,280 units over a 20-year period.



#### **Important Dates in Lead Prevention**

- 1971 Lead Poisoning Prevention Act passed with blood lead level of concern being 60 micrograms per deciliter of blood or higher
- 1986 Lead in gasoline was slowly phased out and banned altogether in all onroad vehicles
- 2012 The CDC established a new blood lead level of concern at 5 micrograms per deciliter
- 2018 1,491 children tested in Cuyahoga County had elevated blood lead levels

# Emergency Preparedness

Following the tragedy that unfolded on September 11, 2001, the Public Health Security and Bioterrorism Preparedness and Response Act became effective in June 2002. Designed to increase the nation's capacity to prevent and respond to bioterrorism and public health emergencies, a main focal point of the Act was *preparedness and response planning*, *coordinating*, *and reporting* (9).

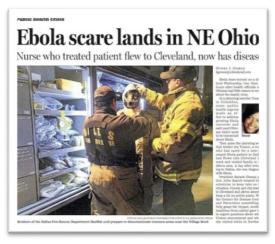
As a result of the new landscape called "emergency preparedness," our duties expanded and the face of public health was forever changed.

#### **Ebola**

When Cuyahoga County was affected by Ebola in October 2014, it was a true test of the region's ability to meet the challenges of responding to a high-profile public health emergency.

Working with federal, state and local partners, our staff offered guidance and support to businesses, healthcare providers, municipalities and public safety forces while also focusing on prevention, surveillance, and education.

We also provided long-term assistance for a group of airline travelers who came in contact with an individual that tested positive for Ebola, which included daily in-person monitoring of their health status.



#### 2016 Republican National Convention

As nearly 50,000 people visited Northeast Ohio during a week in July, the importance of public health was on full display, albeit behind the scenes (11). We were part of a regional team that was entrusted with protecting the health and well-being of delegates, visitors, and government officials as they attended one of the most high-profile events on our national political calendar.

To properly prepare, we were present at countless planning sessions and mock drills, trying to anticipate potential problems and simulate real-time events. The lessons that we learned from several years of food defense work with the Department of Homeland Security helped us before, during and after the convention.

Since dignitaries and government officials are potential targets for intentional food contamination, one of our primary roles in this event was to assist with food protection and illness prevention. The convention afforded us an excellent opportunity to assess our readiness and demonstrate our capabilities, both as an agency and a partner in preparedness.

# Accreditation

Accreditation provides a framework for health departments to identify performance improvement opportunities, to improve management, develop leadership, and to improve community relationships. All of these components are designed to produce better health outcomes for our communities (12).

<u>The Public Health Accreditation Board (PHAB)</u> is a non-profit organization dedicated to advancing the continuous quality improvement of health departments. While PHAB accreditation is voluntary on a nationwide basis, Ohio was one of the first states to mandate that all of its health departments earn this accreditation (13).

Our department became accredited in 2019, thanks to the tireless efforts of our staff and community partners. We are required to renew our status in five years, so we are already planning for the next phase of performance analysis and quality improvement.



# Our Staff



Terry Allan, Health Commissioner **Board Members:** Doug Wang, Debbie Moss, Esq., Gregory Hall, M.D., Sherrie Dixon Williams, M.D., James T. Gatt





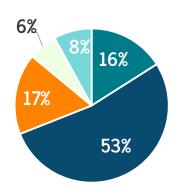




# Financial Overview

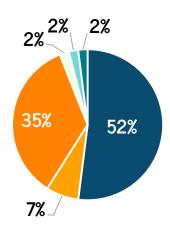
#### Revenue

Total Revenue \$25,522,951	
Other Receipts 1,934,156	
Charges for Services 1,514,224	
Licenses, Permits & Fees 4,247,435	
Federal, State & Local Funds 13,640,260	
City. Village, & Township \$4,186,876	



#### **Expenditures**

Total Expenditures	\$24,217,267	
Capital Outlays	387,537	
Debt Services	474,585	
Supplies & Materials	426,834	
Grants & Subcontracts for Services	8,469,524	
Services & Charges	1,896,136	
Personal Services	\$12,562,651	



#### **Funders**

Centers for Disease Control and Prevention
Cities, Villages and Townships of Cuyahoga County
City of Cleveland Department of Public Health
City of East Cleveland
Cuyahoga County Health and Human Services
Cuyahoga County Department of Sustainability
Cuyahoga County Solid Waste Management District
Ohio Department of Administrative Services
First Year Cleveland
Health Comp Foundation
Mt. Sinai Health Care Foundation
National Network of Public Health Institutes
Northeast Ohio Regional Sewer District

Office of the Cuyahoga County Executive
Ohio Department of Education
Ohio Department of Health
Ohio Department of Transportation
Ohio Environmental Protection Agency
Ohio Hospital Association
Robert Wood Johnson Foundation
Starting Point
Summit County Health District
Tufts University
United Way of Greater Cleveland
U.S. Department of Health and Human Services
U.S. Department of Housing and Urban Development

### References

- 1) Bunker JP, Frazier HS, Mosteller F. Improving health: measuring effects of medical care. Milbank Quarterly 1994;72:225-58.
- 2) <u>www.cdc.gov/mmwr/preview/mmwrhtml/00056796.htm</u>
- 3) <a href="https://www.cincinnati.com/story/news/2018/10/17/city-suffered-through-deadly-1918-flu-pandemic/1669793002/">www.cincinnati.com/story/news/2018/10/17/city-suffered-through-deadly-1918-flu-pandemic/1669793002/</a>
- 4) www.cdc.gov/flu/pandemic-resources/2009-h1n1-pandemic.html
- 5) <a href="https://www.cidrap.umn.edu/news-perspective/2012/06/cdc-estimate-global-h1n1-pandemic-w20%20%20%20deaths-284000www.ag.ndsu.edu/foodlaw/overview/history/milestones">www.cidrap.umn.edu/news-perspective/2012/06/cdc-estimate-global-h1n1-pandemic-%20%20%20%20deaths-284000www.ag.ndsu.edu/foodlaw/overview/history/milestones</a>
- 6) www.ah.ndsu.edu/foodlaw/overview/history/milestones
- 7) <a href="https://safefoodalliance.com/food-safety-resources/what-is-fsma/">https://safefoodalliance.com/food-safety-resources/what-is-fsma/</a>
- 8) https://cfpub.epa.gov/watertrain/moduleFrame.cfm?parent\_object\_id=2571
- 9) www.everycrsreport.com/reports/RL31263.html
- 10) www.cleveland.com/top-5/2014/10/ebola scare grips northeast oh.html
- 11) www.cleveland.com/rnc-2016/2017/08/the republican national conven.html
- 12) https://phaboard.org/what-is-public-health-department-accreditation/
- 13) www.dispatch.com/article/20150727/news/307279830

### COMMUNITIES SERVED

Bay Village Garfield Heights Oakwood Village

Beachwood Gates Mills Olmsted Falls

Bedford Glenwillow Olmsted Township

Bedford Heights Highland Heights Orange Village

Bentleyville Highland Hills Parma

Berea Hunting Valley Parma Heights

Bratenahl Independence Pepper Pike

Brecksville Lakewood Richmond Heights

Broadview Heights Linndale Rocky River

Brooklyn Lyndhurst Seven Hills

Brooklyn Heights Maple Heights Shaker Heights

Brook Park Mayfield Heights Solon

Chagrin Falls Township Mayfield Village South Euclid

Chagrin Falls Village Middleburg Heights Strongsville

Cleveland Heights Moreland Hills University Heights

Cuyahoga Heights Newburgh Heights Valley View

East Cleveland North Olmsted Walton Hills

Euclid North Randall Warrensville Heights

Fairview Park North Royalton Westlake

Woodmere

# BOARD OF HEALTH YOUR TRUSTED SOURCE FOR PUBLIC HEALTH INFORMATION

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