

Georgia Board of Public Health

Sept. 10, 2019

Agenda

- Call to order
- Roll Call
- Approval/Adoption of Minutes
- Commissioner's Update

James Curran, M.D., Board Chair

Mitch Rodriguez, M.D., Secretary

Mitch Rodriguez, M.D., Secretary

Kathleen E. Toomey, M.D., M.P.H., Commissioner

Epidemiology Updates

Board of Public Health / Cherie L. Drenzek, DVM, MS / State Epidemiologist & Chief Science Officer / Sept. 10, 2019

Outbreak of Severe Pulmonary Disease Associated with E-Cigarette Use, United States, 2019

Background:

- E-cigarettes are battery-operated devices that heat a liquid and create an aerosol inhaled by the user (also called vaping)
- These vaping liquids contain nicotine, flavorings, and other chemicals/additives (like solvents or oils).
- E-cigarettes are increasingly being used to deliver THC, cannabis oils, and other drugs.

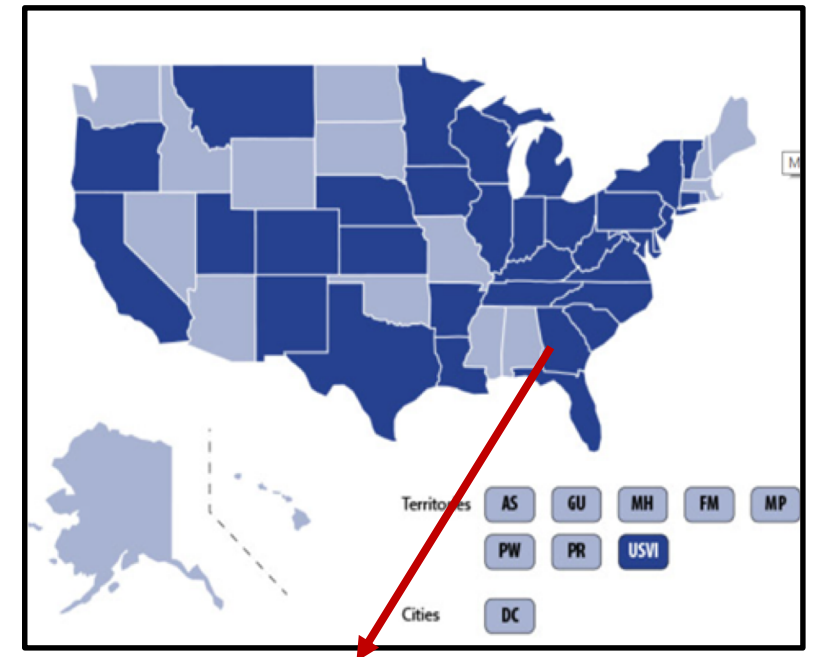
Initial Outbreak Detection

- In July 2019, the Wisconsin and Illinois state health departments investigated reports of 53 young persons with severe pulmonary illness associated with vaping (earliest onset was April 2019) (<https://www.nejm.org/doi/10.1056/NEJMoa1911614>)
- Since then, a total of 450 possible cases (and 5 deaths) have been reported from 33 states and the USVI; **ALL reported vaping.**

Outbreak of Severe Pulmonary Disease Associated with E-Cigarette Use, United States, 2019

- CDC launched a multi-state outbreak investigation and released a national health alert on August 30, 2019.
- Using initial clinical and epidemiologic information, a national case definition was established so that cases could be identified and counted in a standard way.
- As of Sep. 6, 2019, 215 confirmed cases have been identified nationally (and 235 still under investigation).

Geographic Distribution of Case-Patients, Sep. 6, 2019



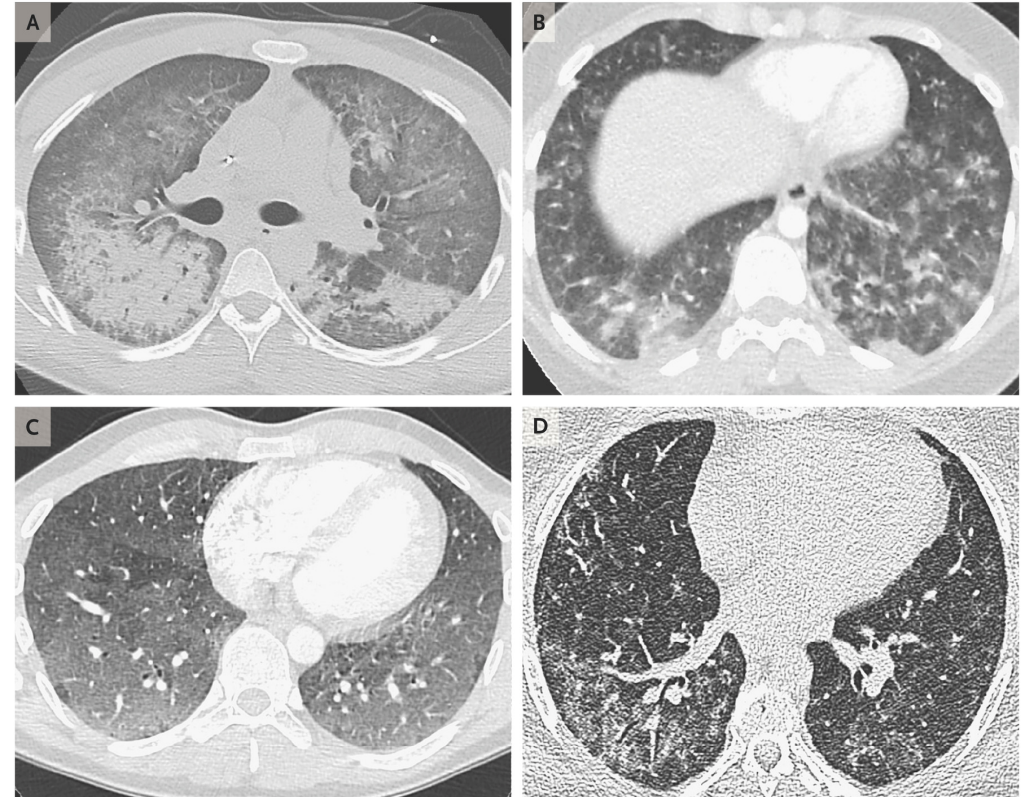
2 confirmed cases in Georgia

Clinical Characteristics

- Case-patients reported respiratory symptoms such as cough, shortness of breath, or chest pain as well as gastrointestinal symptoms like nausea, vomiting, or diarrhea.
- Symptoms developed over a period of days to weeks (and worsened)
- About 95% of case-patients were hospitalized, half in ICU for respiratory failure, and 1/3 needed mechanical ventilation.
- The median duration of symptoms before hospital presentation was 6 days, and about $\frac{3}{4}$ of case patients were seen first in outpatient settings (and prescribed antibiotics)
- Fever, elevated heart rate, and elevated white blood cell count have been reported, even though infectious causes were ruled out in all confirmed cases.

Clinical Characteristics

- All case-patients had pulmonary infiltrates, seen as opacities on plain film chest X-rays or characteristic **ground-glass** opacities on chest CT.
- A cluster of 5 case-patients in North Carolina exhibited **“lipoid pneumonia”**, which is an inflammatory response to aspiration of oil into the lungs (lipoid not in all cases, though).
- Most patients responded to steroid treatment--however, the optimal treatment regimen and duration, as well as the long-term effects of this lung injury, are uncertain.



<https://www.nejm.org/doi/10.1056/NEJMc1911995>

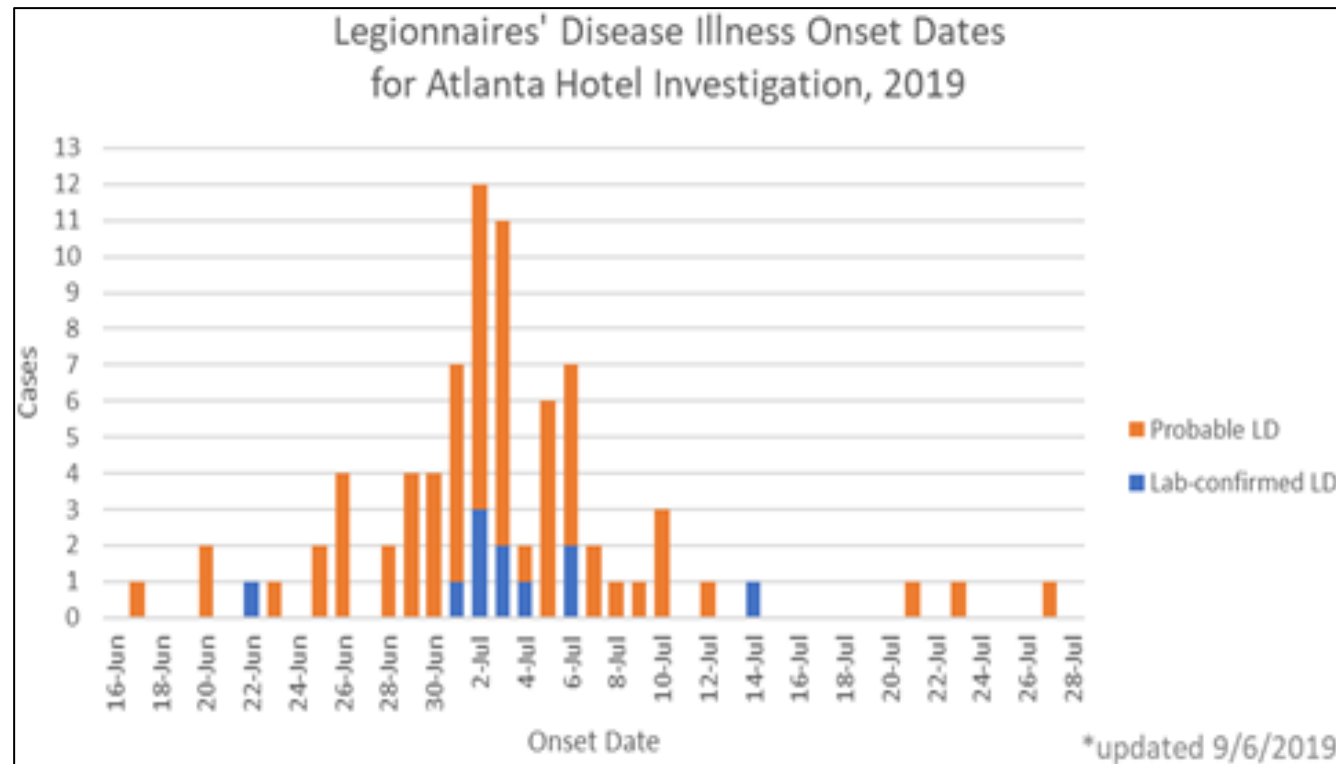
Epidemiologic Investigation

- Over 80% of case patients were males, most between 17-35 years old (median 19 years)
- 100% of case-patients reported vaping in the 90 days prior to illness onset
- The investigation has **not** identified any specific substance or e-cigarette product that is linked to all cases.
- Most patients (about 80%) reported using e-cigarette products with liquids that contain THC (or were added in).
- Many secured the THC products through social networks or “off the street”
- FDA has been testing retained products/devices from case-patients; no one chemical has been identified
- A NY investigation has found vitamin E acetate in several products from case-patients, but the significance of this needs further evaluation.
- Information to date suggests the illness to be related to **a chemical exposure**

Implications/Recommendations

- CDC Recommendation: Until a definitive cause is known, persons should **not** use e-cigarettes.
- Those who do vape should monitor for any symptoms (cough, shortness of breath, chest pain, nausea, vomiting, etc.) and seek medical attention for any health concerns.
- Regardless of the ongoing investigation, persons who use e-cigarette products should **not** buy these products off the street and should **not** modify them or add any substances that are not intended by the manufacturer.
- Clinicians should report possible cases to DPH Epidemiology or the GA Poison Center for further investigation (i.e. whether they meet the national case definitions, what products and devices were used, the source(s) of the product, and whether any remains for testing)
- [Severe Pulmonary Disease Associated with Electronic-Cigarette–Product Use — Interim Guidance](#)

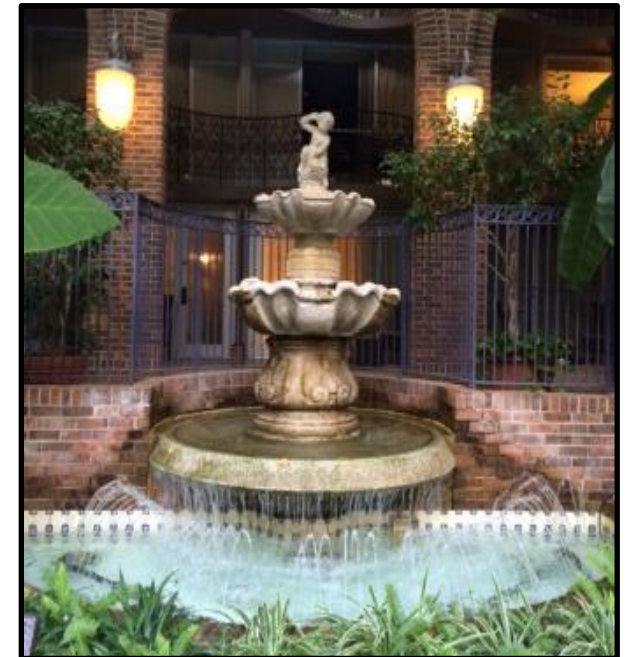
Update: Legionnaires' Disease Outbreak at Sheraton Atlanta Hotel



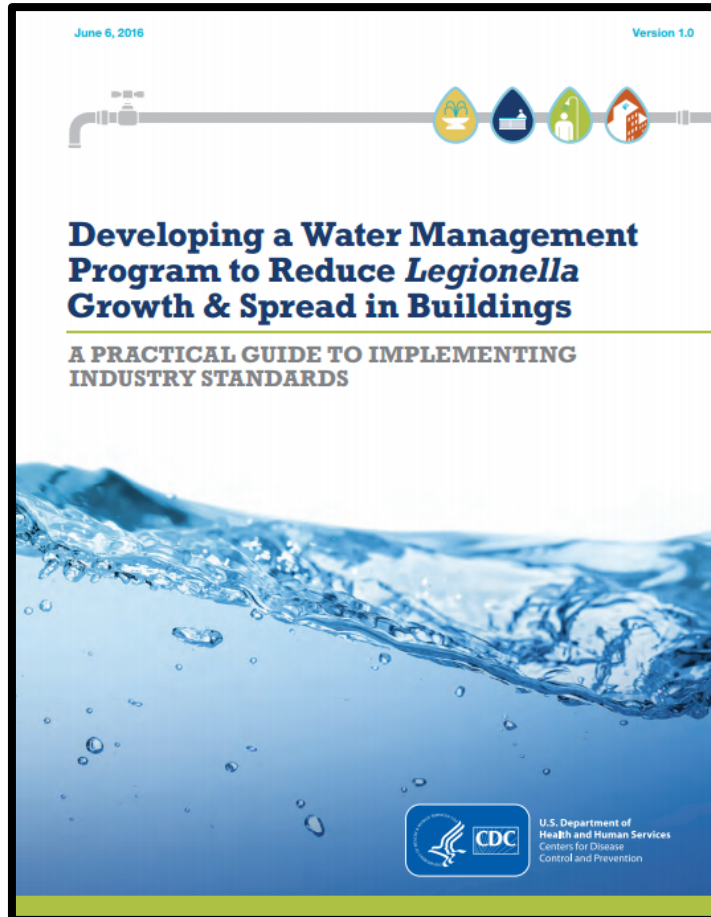
- As of Sept. 9, we have identified **13** lab-confirmed and **68** probable LD cases, including one death.
- Probable cases had pneumonia (by chest x-ray or clinician-dx) AND were epi-linked (at the hotel within 14 days of illness)
- Since the hotel voluntarily closed on July 15, 2019 and the incubation period of *Legionella* is about two weeks, we would not expect to identify more new cases.

Update: Legionnaires' Disease Outbreak at Sheraton Atlanta Hotel

- Environmental sampling results indicated the presence of *Legionella* bacteria in the hotel's cooling tower and in a decorative fountain.
- By genetic sequencing, the *Legionella* isolates from the fountain exactly matched the *Legionella* isolate from a case-patient (and the cooling tower was different).
- Remediation was made to the entire hotel water distribution system (including disabling the fountains).
- Hotel reopened on Aug. 15, 2019 with the full support of FCBOH and DPH.



Legionella Outbreak Prevention



Prevention is key, remediation of outbreaks is **extremely** difficult, labor-intensive, and expensive.

Building owners and managers (including hotels, hospitals and healthcare facilities) should develop and use a *Legionella* water management program according to new industry standards

(<http://www.cdc.gov/legionella/WMPtoolkit>)

<https://www.cdc.gov/legionella/water-system-maintenance/healthcare-wmp-faq.html>

Questions?

For more information, please contact:

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Georgia Department of Public Health

Oral Health Program

Georgia Board of Health Meeting / Adam Barefoot DMD, MPH / Sept. 10, 2019

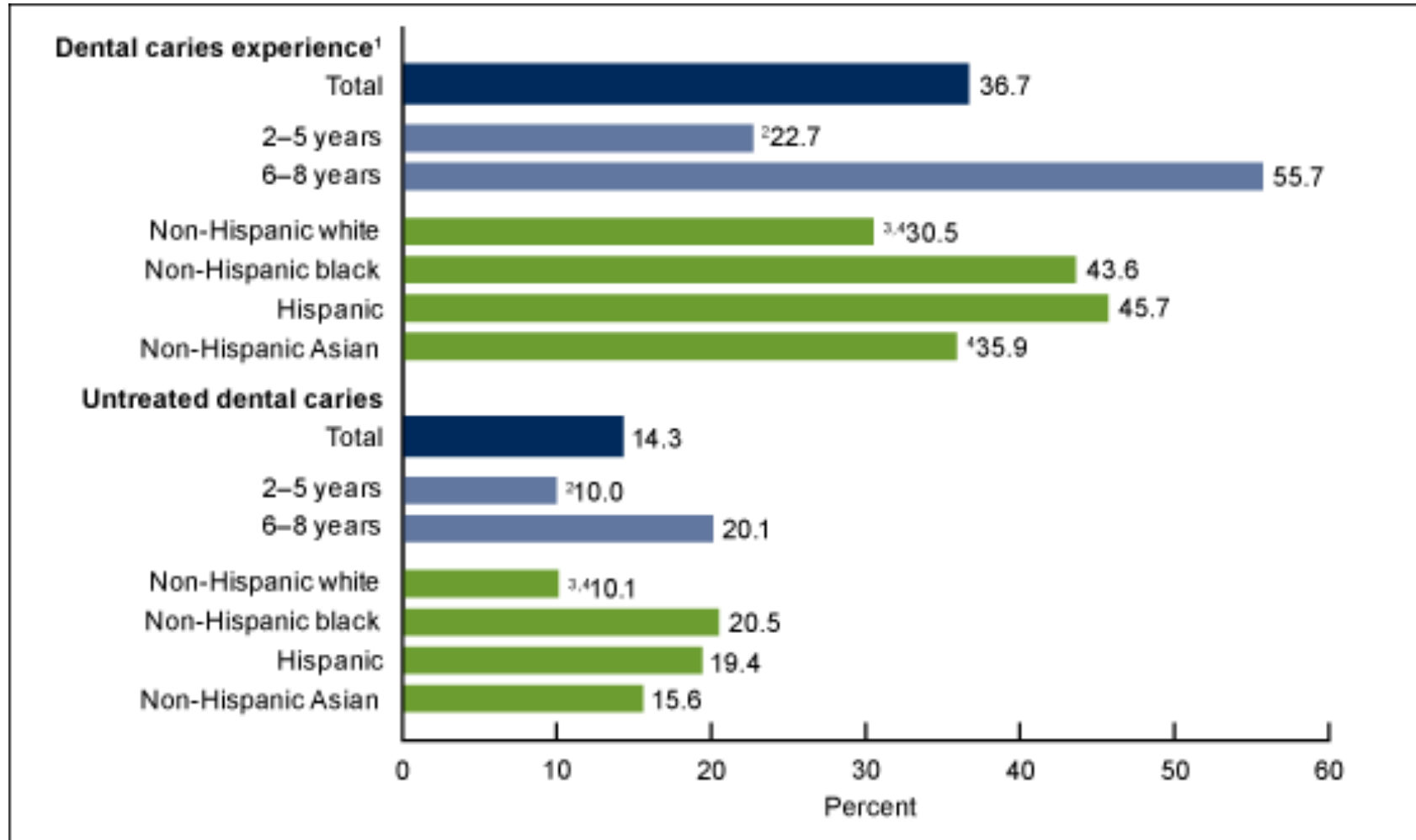
Oral Health Burden

- Dental caries is the most common chronic disease of childhood
- Almost a quarter of adults in the US over age 65 are completely edentulous – lacking all teeth
- Significant disparities exist based on socioeconomic status and racial ethnicity
- Increased correlation between oral and systemic disease
- Beyond oral physiological factors impact can negatively effect mental, emotional, social, and even societal outcomes

Oral/Systemic Connection

- Oral health problems have been linked to cardiovascular disease, stroke, diabetes, cancer, pulmonary issues, and Alzheimer's disease
- Poor oral health during pregnancy has been associated with preterm birth and low birth-weight babies

Prevalence of Childhood Decay Nationally



http://www.cdc.gov/nchs/data/databriefs/db191_table.pdf#1. SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey, 2011–2012.

Beyond The Mouth

Good oral health leads to:

- Better Nutrition
- Social Skills
- Employability
- Improved educational performance
- Positive factors for childhood development
- Work productivity/capacity

Poor oral health leads to:

- Difficulty sleeping
- Poor focus
- Learning barriers and reduced school attendance
- Speech issues
- Poor nutrition
- Reduced capacity to succeed
- Negative self image
- Social isolation
- Correlation to negative systemic health outcomes

Statement from the U.S. Surgeon General

“Oral health is essential to the general health and well-being of all Americans and can be achieved by all. However, many Americans continue to experience unnecessary pain and complications from poor oral health that adversely affect their well-being, adding substantial economic and social costs.”

- Dr. Jerome Adams MD, MPH

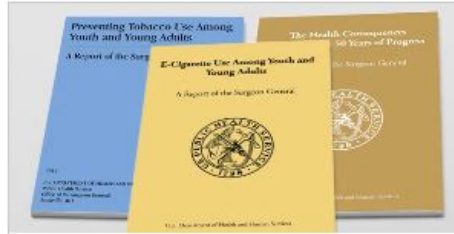


Current Surgeon General Priorities



[Opioids and Addiction](#) →

The opioid epidemic and substance use disorders more broadly have become one of the most common chronic illnesses in the U.S.



[Tobacco](#) →

Tobacco use is the leading cause of preventable death in the United States and worldwide.



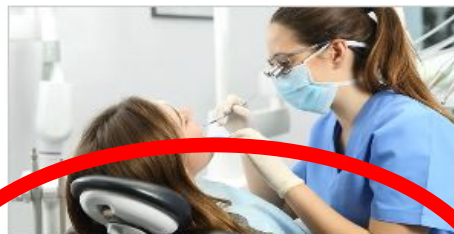
[Community Health and Economic Prosperity](#) →

America's prosperity is being hampered by preventable chronic diseases and behavioral health issues.



[Health and National Security](#) →

Wellness is at the heart of the safety and security of our nation.



[Oral Health](#) →

Oral Health is essential to the general health and well-being of all Americans and can be achieved by all.



[Emerging Public Health Threats](#) →

As the Nation's Doctor, the Surgeon General is responsible for communicating the best available science to the American people.



Georgia Third Grade Basic Screening Survey

- 51% of Children Screened had a history of dental decay compared to Healthy People 2020 Goal of 49%
- 19% had active untreated decay compared to Healthy People 2020 Goal of 25.9%
- 34.8% had presence of sealants compared to Healthy People 2020 Goal of 28.1%
- 2.2% needed urgent dental care, no Healthy People 2020 comparison exists

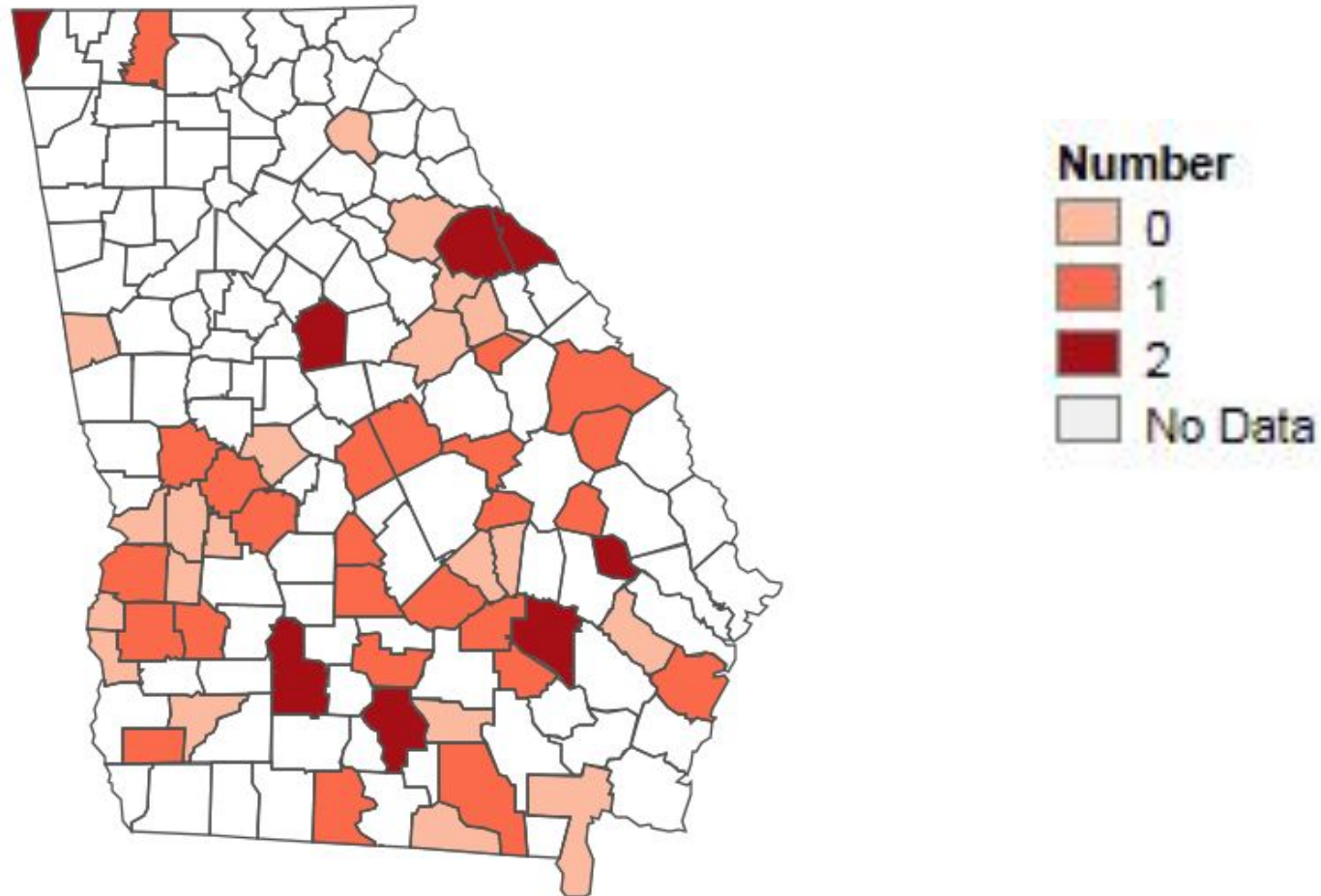
2016-2017 Data

Georgia PRAMS 2017

- 36% of women reported seeing a dentist or dental hygienist in the 12 months before becoming pregnant
- 39% of women reported having a teeth cleaning during their most recent pregnancy
- 47% of women reported that a dental or health care worker talked with them about how to care for their teeth and gums during their most recent pregnancy
- 19% of women needed to see a dentist for a problem during pregnancy
- 13% of women went to a dentist or dental clinic about a problem during pregnancy

Georgia Dental Workforce – Access Challenges

Counties with 0-2 Dental Provider Sites



Georgia DPH Oral Health Program

State

- State Dental Director
- Program Manager
- Fluoridation Coordinator
- School Sealant Coordinator

Support Roles

- Program Evaluator
- Program Epidemiologist

Districts

- Various program structures and capacity among the 18 health districts
- 10 Districts have Dental Directors currently
- Other districts use a mix of part time staff, county public health dentists, or dental hygienist to manage oral health programs

Georgia DPH Oral Health Program

Key Priorities and Activities

- Support oral health programs among 18 health districts
- Promote, support and expand school sealant and oral health prevention programs
- Maximize the number of Georgians with access to optimally fluoridated drinking water through community water systems
- Conduct statewide oral health surveillance
- Build partnerships with external organization aligned with our mission to make the most efficient use of resources to expand impact

School Sealant Programs

- Majority of programs are carried out by DPH district staff in Dalton, Augusta, Gwinnet, DeKalb, and Lagrange
- 3 other districts have worked to begin initiation of a school-based sealant program
- We partner with dental hygiene programs to carry out these programs in 3 additional districts
- There were 39 total sealant programs in FY 2019

Community Water Fluoridation

- Approximately 335 adjusting water community water systems in the state
- Send monthly split samples to DPH lab to monitor fluoride levels and ensure optimal fluoridation levels (set forth by CDC)
- Approximately 96% of Georgians on community water systems have access to fluoride in their drinking water compared to a Healthy People 2020 Goal of 79.6%
- Partner with Georgia Rural Water Association to work with local community water plant operators

Oral Health Campaign

Improve oral health literacy in the caregivers of young children

- Seeing a dentist by age one or first tooth
- Brushing with a rice grain size of toothpaste at first tooth
- Baby teeth matter
- Oral health impacts overall health

Improve oral health literacy of pregnant women

- Now you are brushing for two
- Your oral health can impact your baby's health
- It is safe and recommended to see a dentist during your pregnancy

Supported by a competitive grant awarded by CDC

Questions

For More Information:

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Hurricane Dorian – Public Health Response

Board of Public Health Meeting / R. Chris Rustin, DrPH, MS, REHS/ Sept. 10, 2019

Hurricane Dorian

August 24 -Tropical Storm Dorian

- Moving W at 12 mph
- Advisories for Lesser Antilles

August 28 – 29 Hurricane Dorian

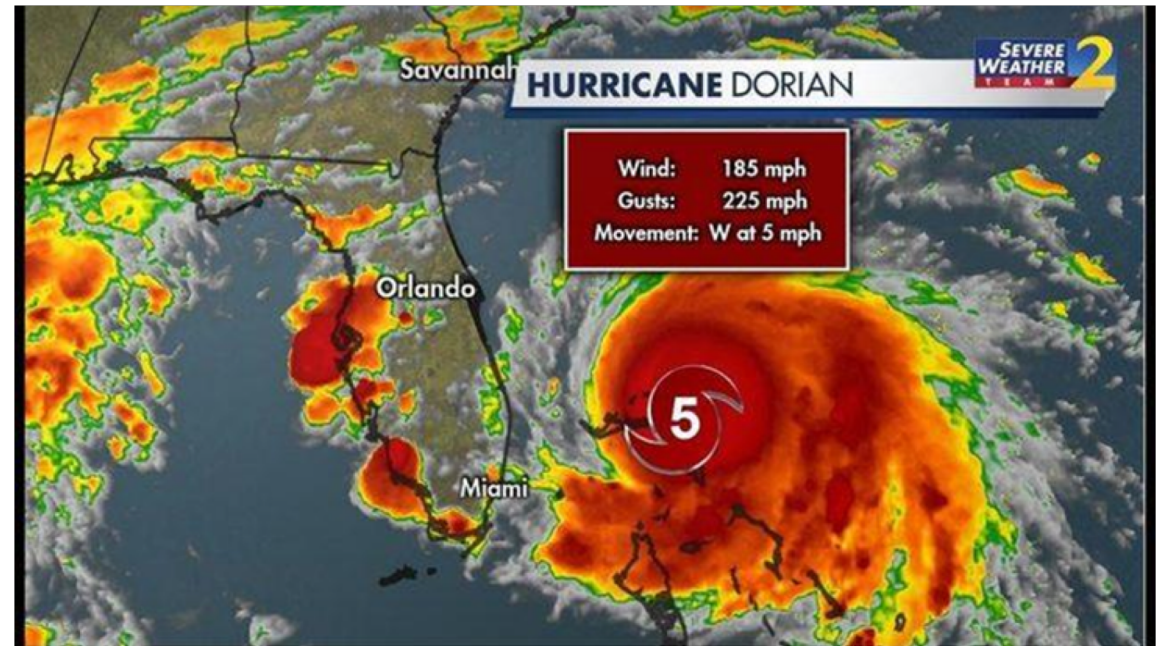
- Category 1-4
- U.S. Virgin Islands
- Bahamas

August 30 Major Hurricane

- Category 5
- Bahamas

Sept.1 and 6 Governor Kemp ordered evacuations

- 6 coastal counties
- 21 counties



Courtesy: AJC/WSB TV

Planning Stage

- Public Health was tracking storm and participating in National Hurricane Center calls
- Planning with GEMA partners, Coastal Health District representatives, and other districts that would receive evacuees, regarding movement of functional medical needs
- Planning with districts for potential shelter locations

Public Health Response

- Aug. 29 – Sept. 6, 2019
- Assisting with the evacuation of healthcare facilities and vulnerable populations primarily from the six coastal counties within Georgia
- Maintaining situational awareness between our local public health districts, healthcare facilities, state leadership and federal partners
- Meeting resource assistance needs from our local public health districts and healthcare facilities
- Preparing to respond to actual impacts once Hurricane Dorian has passed the area

Medical Transport Coordination-State Ops Center

- DPH staffed the state operations center (SOC) from Aug. 29 – Sept. 5
 - Emergency Preparedness staff
 - EMS staff
 - GEMA staff
 - DCH Nursing staff
- Coordinated over several days with the six coastal counties and the Coastal Health District to evacuate residents
- Reviewed and confirmed all resident data on the Functional and Access Medical Needs list and secured placement, e.g., nursing homes, hospitals, etc.
 - Coordinated evacuation of **537** coastal residents

Public Health Coordination-DPH EOC

- DPH coordinated and assisted multiple Emergency Support Function partners (particularly ESF 6 Mass Care and Sheltering)
- Personnel were deployed to shelters to assist with individuals in Georgia's vulnerable population
- Maintained epidemiological surveillance of responding public health personnel at state and local levels, and within shelters and healthcare facilities
 - No injuries or illnesses reported
- Environmental Health (EH) staff inspected shelters and mass feeding sites to ensure safety and sanitation

Public Health Response-Local Level

- Local and district PH manned local EOCs 24/7 coordinating ESF 8 activities
- Coordinated with DPH on evacuation of Functional and Access Medical needs residents
 - Assisted with verifying Medical Needs list
 - Staff assisted residents with onboarding transportation
 - Liaison between DPH EOC and SOC
- Responded to public questions on potential or actual Dorian related impacts or risks

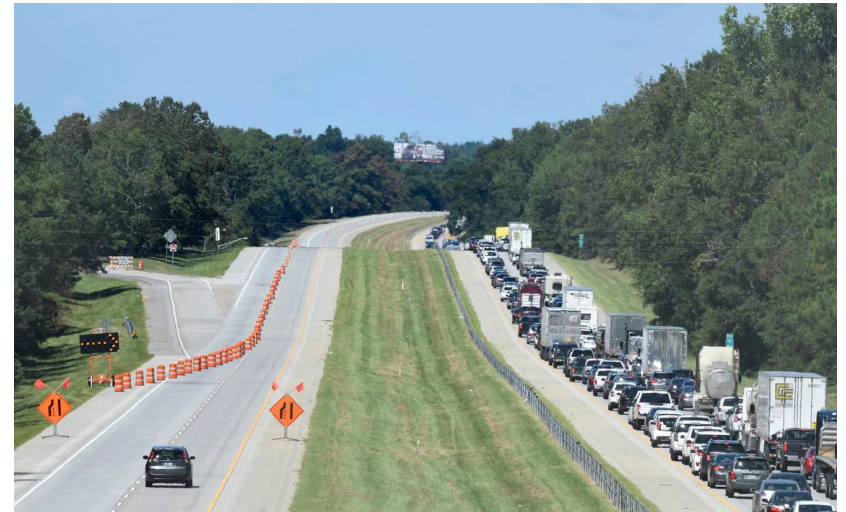
Environmental Health Response

- Situational awareness for EH resource requests through active monitoring
- Passive and active monitoring for EH concerns in shelters and mass feeding sites through district/county situation reports
 - Daily shelter and mass feeding site inspections
 - Provided resident evacuation assistance
- EH strike teams (31 team members) on standby to assist with anticipated post-hurricane needs (flooding remediation, mold questions and food safety)
- Mass fatality response preparedness - six morgue trailers ready to deploy as needed

Date	Sites	Meals	Shelters Opened	Shelters Inspected	Population
5-Sep	13	3147	15	13	2477
4-Sep	13	3792	15	15	2056
3-Sep	10	2237	15	14	2314
2-Sep	2	30	13	8	404
Totals		9206		50	

Response Statistics

- 21 counties evacuated
- 67 public health nurses deployed
- 3 nurse volunteers
- 21 nursing homes evacuated
- 17 nursing homes sheltered in place
- 4 hospitals evacuated
- 15 hospitals sheltered in place
- 537 residents with medical needs evacuated



Courtesy: Macon Telegraph

Demobilization

- Coordinated repatriation of all residents that were evacuated
- Assisted ARC with shelter demobilization
- Will complete a hot wash and after-action review to improve future public health responses
- September 7, final day of DPH staff working at SOC on demobilization

Questions

For More Information:

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Next Meeting

The next Board of Public Health meeting is scheduled for
Tuesday, Oct. 8, 2019 @1 p.m.