ALABAMA
PUBLIC
HEALTH

ALABAMA DEPARTMENT OF PUBLIC HEALTH

ANNUAL REPORT
2020

STATE COMMITTEE OF PUBLIC HEALTH

Gary F. Leung, M.D.
Chair

Gregory W. Ayers, M.D.
Vice Chair

Scott Harris, M.D., M.P.H.
Secretary

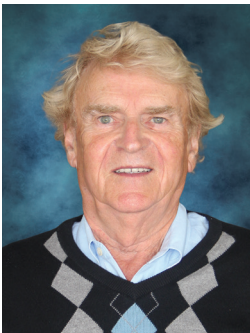**Eli L. Brown, M.D.**

Hernando D. Carter, M.D.

Michael T. Flanagan, M.D.

Beverly Jordan, M.D.

Mark H. LeQuire, M.D.

Patrick O'Neill, M.D.

Dick Owens, M.D.

Charles M.A. "Max" Rogers, IV, M.D.

William Jay Suggs, M.D.

Jane Ann Weida, M.D.

James C. Wright, D.V.M.
Council on Animal and Environmental Health

Stuart A. Lockwood, D.M.D.
Council on Dental Health

Joseph Marchant
Council on Health Costs, Administration and Organization

Greg Gillian, P.E., P.L.S.
Council on Prevention of Disease and Medical Care

A LETTER FROM THE STATE HEALTH OFFICER

The Honorable Kay Ivey
Governor of Alabama
State Capitol
Montgomery, Alabama 36130

Dear Governor Ivey:

I am pleased to present the Annual Report of the Alabama Department of Public Health (ADPH) for 2020. This report reflects the rapid and unparalleled pandemic response of ADPH during this year when the challenge of protecting the health of Alabamians became paramount as we worked to mitigate the effects of the largest outbreak of a single disease in more than 100 years.

Early on, ADPH recognized the implications of the emerging global crisis and began preparing for the possibility of an exponential growth in infections from a novel virus, severe acute respiratory syndrome coronavirus 2, which was named Coronavirus Disease 2019 (COVID-19). Our dedicated professionals joined you, other leaders, and partners to develop and implement strategies to combat this highly communicable deadly virus by providing critical information and resources.

As the pandemic progressed, a Unified Command, including the Alabama National Guard and the Alabama Emergency Management Agency, was formed to address the multiple needs of state residents. Teams monitored healthcare facilities' status regarding bed availability, supplies, and other resources in the state. When personal protective equipment was required but supplies were low, ADPH shipped Alabama's existing stockpile to healthcare communities and coordinated with healthcare coalitions to share other resources among facilities. Through collaborative efforts, we purchased, warehoused, and distributed equipment that enabled Alabama's healthcare system to remain operational.

Public health employees volunteered and were deployed to conduct contact tracing and death investigations, assist in the operation of the statewide COVID-19 information hotline, package test kits, deliver equipment, and organize and staff testing clinics. As medications received emergency use authorization for the treatment of COVID-19, employees made expedited deliveries to healthcare facilities and assisted pharmacies in enrolling them as testing sites and vaccination providers.

Enhanced use of information technology remains key to the pandemic response. ADPH increasingly relied on computer-based platforms and secure electronic laboratory reporting to track disease spread. The total number of notifiable disease reports in Alabama grew exponentially in 2020 due to COVID-19. Surveillance dashboards have become important ways to communicate with the public, as visualization tools help convert disease surveillance data into a form that is easier for the public to understand. As the pandemic evolved, ADPH provided an unprecedented amount of educational materials and information to varied audiences through traditional and social media and graphics. As the year ended, ADPH employees spearheaded efforts to vaccinate Alabama residents, and our employees vaccinated as many residents as the limited vaccine supply allowed.

The desire for equitable vaccine distribution was a driving force in the implementation of this immunization effort. Recognizing that Black Alabamians were disproportionately affected by the pandemic, vaccination efforts were prioritized to reach our state's most vulnerable communities.

Even though the pandemic had a significant impact on all programs, ADPH employees continued to carry out their responsibilities and maintain the integrity of public health services. After the public health emergency was declared, ADPH's quick response ensured essential services were provided. Some programs implemented a telephone visit model. The ALL Kids Program extended coverage for up to 60 days for enrollees who were due to renew during the spring months, and other allowances were made.

Substantial portions of ADPH's efforts in 2020 were devoted to lessening the impact of the accelerating pandemic on Alabama, but other public health challenges continued to be addressed. ADPH remains committed to promoting evidence-based initiatives to address the wide range of public health needs, including infant mortality. Alabama's infant mortality rate increased from 7.0 infant deaths per 1,000 live births in 2018 to 7.7 infant deaths per 1,000 live births in 2019. While this is the third lowest rate Alabama has seen in over 5 decades, it remains above the United States 2019 provisional rate of 5.7 infant deaths per 1,000 live births, and racial disparities continue.

Family planning services were provided for 40,800 individuals of reproductive age, 172 infants with a newborn screening condition were identified, cancer screenings were given for the uninsured and underinsured, and the Alabama Drug Assistance Program served nearly 4,000 clients.

Prevention and control of other designated communicable diseases and illnesses included the investigation of 647 outbreaks and clusters. A wide range of important regulatory services continued to protect the public. These included enforcing standards in environmental health, emergency medical services, facility inspections, radiological health, and other areas.

A highpoint of the year was the opening of a new Bureau of Clinical Laboratories building, Administrative Annex, and Training Center in Prattville. The 66,000 square foot state-of-the-art laboratory enhances ADPH's ability to identify and respond to current and emerging public health threats ranging from disease outbreaks such as COVID-19 to bioterrorism. Throughout the lab relocation from an outdated facility in Montgomery, careful planning allowed 7-day-a-week COVID-19 testing to continue without interruption. In addition to the laboratory, the adjacent modern training facility and annex provides needed meeting and office space.

ADPH is very proud of our compassionate, capable, responsive, flexible, and dedicated staff of committed public health professionals and the vital role they play in mitigating the effects of the pandemic. ADPH also values the strong community partnerships we have made to address the challenges ahead, and will continue to evaluate and improve our response efforts to create an environment in which all Alabamians are healthy by promoting, protecting, and improving health.

Sincerely,

Scott Harris, M.D., M.P.H.
State Health Officer

TABLE OF CONTENTS

MISSION
To promote, protect, and improve Alabama's health

VISION
Healthy People. Healthy Communities. Healthy Alabama

CORE VALUES

Excellence – We believe in providing the highest quality services to our clients. We believe that all clients should be served with compassion, empathy, fairness, and respect.

Integrity – We believe our employees should be professional, competent, honest, and knowledgeable; maintaining the highest level of integrity, accountability, confidentiality, and concern for our clients. We believe in always striving to maintain the public trust.

Innovation – We believe that we should demonstrate the ability to adapt to change and to be flexible in our approach to solving problems and providing services.

Community – We believe that we should build and maintain internal and external partnerships to address public health challenges including effectively utilizing resources, solving problems, and building relationships.

CENTRALIZED BILLING UNIT (CBU)

The CBU exists to provide statewide county support for claim corrections, credits, and resubmissions to recover the maximum amount of revenue owed to the department. CBU also provides administrative services to ensure compliance and integrity with all insurance payer sources as well as local, state, and federal requirements. The unit's responsibilities include the following:

- Provider enrollment
- Re-enrollment of clinical locations
- Reactivation of provider status
- Liaison for all payer sources including private and state agencies
- Utilizing current procedural terminology coding with a certified coder on staff
- Monitoring billing contracts and/or provider agreements
- Credentialing
- Other reporting analysis and trends

Telemedicine

In 2020, telemedicine played an important role in helping control the rapid spread of COVID-19. Face-to-face clinical services were replaced with the use of technology by providers to offer remote care to patients. As telemedicine rules and regulations continuously evolved, CBU stayed up to date on telemedicine reimbursement policies offered by the most commonly used payer sources to ensure the department received revenue for services rendered during the pandemic.

Disease Control Services

Despite being inundated with efforts to combat COVID-19, CBU continued its pursuit of billing for disease control services. After the successful submission of test claims in 2019, CBU was able to work in conjunction with the Bureau of Information Technology (IT) to submit claims and receive reimbursement for all disease control services rendered in the local county health departments for fully Medicaid-eligible patients. The ability to bill for these services helped with the financial reimbursement to continue to prevent the spread of sexually transmitted diseases and related sequelae such as preterm birth, congenital syphilis, and infertility. The ability to bill also satisfied the department's obligation to federal partners to seek additional funding to support prevention efforts.

Adult Immunization

CBU was called upon to assist in the department's efforts to bill for the administration fee for the COVID-19 vaccine. CBU re-enrolled each county health department as an adult immunization provider with the Alabama Medicaid Agency. Re-enrollment will allow the department to receive reimbursement for administering not only the COVID-19 vaccine, but other adult immunizations as well.

Clinical and Laboratory Services

CBU continues the great partnership with IT working with CLAIMS Integration to bill for clinical and laboratory services to both state and third-party payers. CBU works successfully with IT to bill for newborn screening services statewide.

Looking Ahead

CBU will continue to look for opportunities for revenue expansion as well as expanding the services offered to patients. Although COVID-19 has significantly impacted operations, the unit remains committed to supporting effective and efficient work processes to ensure successful revenue recovery efforts.

BUREAU OF CHILDREN'S HEALTH INSURANCE

The Bureau of Children's Health Insurance administers ALL Kids, Alabama's separate Children's Health Insurance Program (CHIP). ALL Kids provides comprehensive health coverage to eligible children and uses the Blue Cross Blue Shield of Alabama provider network. In addition to the ALL Kids Program, as of a result of provisions in the Affordable Care Act, CHIP also funds a group of Medicaid-eligible children (MCHIP), which is administered by the Alabama Medicaid Agency. In FY2020, the ALL Kids Program paid over $220 million in claims to primarily Alabama providers.

In response to the COVID-19 Public Health Emergency (PHE), ALL Kids coverage was extended for up to 60 days for enrollees who were due to renew during the months of April, May, and June. Children who were not eligible due to non-payment, non-response, or were over the income limit were given 2 months of additional coverage to ensure they had access to health services should they need them. New applicants were encouraged to apply online and current enrollees were asked to submit renewal applications and premium payments online. ALL Kids has since returned to processing renewals and terminations on schedule; however, Medicaid is continuing coverage for enrollees until the end of the PHE. Because of this, ALL Kids has seen a decline in enrollment, while Medicaid has seen an increase.

In an effort to assist in reducing infant mortality in Alabama, a new program, ALL Babies, began providing comprehensive coverage for the unborn. The program was approved for three pilot counties: Macon, Montgomery, and Russell. During FY2020, 311 enrollees received coverage.

ALL Kids expanded outreach efforts through the addition of two outreach and retention workers based in local county health departments. These workers are tasked with educating community resources and professionals, as well as families of uninsured children, about ALL Kids and Medicaid. Outreach efforts are currently focused on reaching school systems, daycares, and other educational facilities.

At the end of FY 2020:

- Total CHIP enrollment: 174,401
- ALL Kids: 78,338
- MCHIP: 96,063

Figure 1. Amount ALL Kids Paid in FY 2020 (in millions)

Dental $18.7

Prescription $31.1

Medical (includes Mental Health and Substance Abuse) $172.5
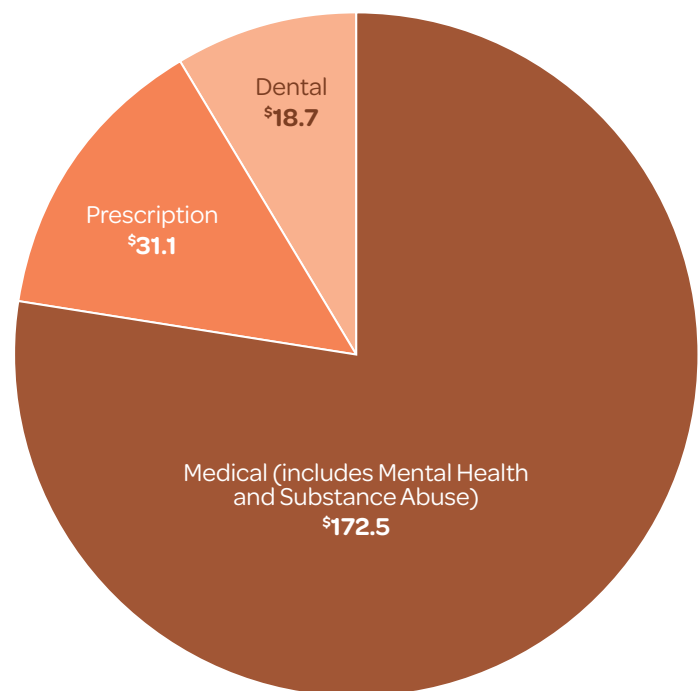
BUREAU OF CLINICAL LABORATORIES (BCL)

The mission of the bureau is to improve and protect Alabama residents' health through laboratory science. The laboratory consists of the Administration, Business Operations, Analytical Chemistry (Chemical Terrorism/Lead), Logistics, Microbiology, Mycobacteriology and Mycotics, Newborn Screening (NBS), Quality Management, Sanitary Bacteriology, Sexually Transmitted Diseases (STD)/Chemistry, and Mobile Laboratory divisions. Testing is funded through Medicaid receipts and federal grants.

While responding to the COVID-19 pandemic, the central laboratory moved from Montgomery into a new $30 million, 66,000 square foot facility in Prattville (Figure 2). The laboratory relocation took place from August 27 through September 9. Seven-day-a-week COVID-19 testing was not interrupted during the move due to careful planning.

Laboratory Quality
Laboratorians work diligently and are committed to ensure testing that supports public health. The BCL is credentialed by the Centers for Disease Control and Prevention (CDC), Food and Drug Administration (FDA), Environmental Protection Agency (EPA), Clinical Laboratory Improvement Amendments, and is working toward ISO 17025:2017 accreditation to ensure quality test results.

Distribution of Clinical Specimens and Environmental Specimens Received
The BCL offers an array of laboratory testing services at the main laboratory in Prattville and a specialty laboratory in Mobile. A total of 1,625,921 laboratory tests were performed in 2020 for the 519,390 clinical specimens and 22,526 environmental samples received. The distributions of specimens are depicted in the accompanying figures (Figures 3 and 4).

## Laboratory Information Management System (LIMS)
Electronic ordering and reporting allow for near real-time results. The number of clinical and environmental results reported electronically to partners continues to increase. The BCL Horizon

Figure 2. The new Donald E. Williamson, M.D., State Health Laboratory, is located at 204 Legends Court in Prattville. Photo credit: Photo courtesy of HDR © 2020 Chris Luker
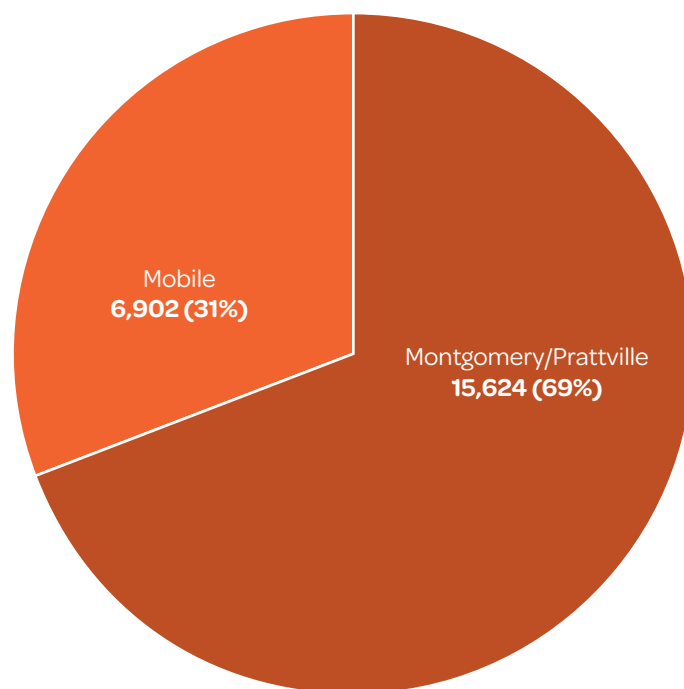
Figure 3. 2020 Distribution of Clinical Specimens Received at the BCL

Mobile
195,355 (38%)

Montgomery/Prattville
324,035 (62%)
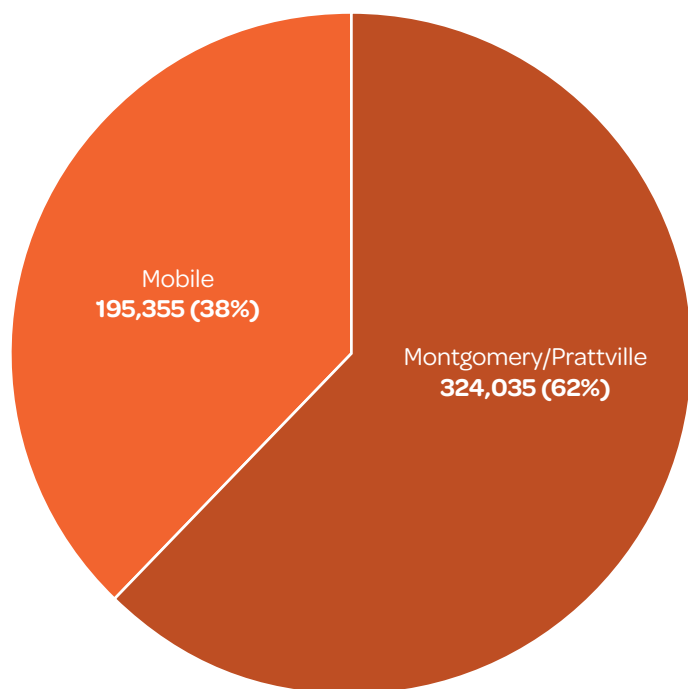
Figure 4. 2020 Distribution of Environmental Specimens

Mobile
6,902 (31%)

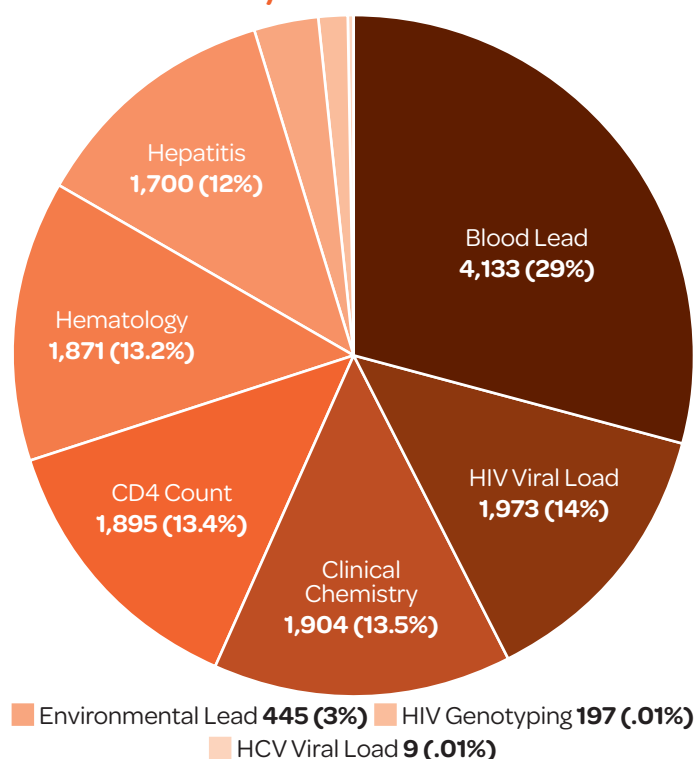Montgomery/Prattville
15,624 (69%)

LIMS updated to a new version, and its capacity continues to expand as new instruments are interfaced. It is interfaced directly with ADPH's electronic health record (EHR), the EHRs of Mobile and Jefferson counties, and direct interface development continues with some partners in the private sector. The number of partners using the web portal more than tripled over the past year, increasing to over 400 accounts. This was due in large part to the outbreak of COVID-19, but it proved to be a beneficial tool for timely reporting. The LIMS for the NBS Laboratory does not receive electronic requests but contains tools that facilitate billing, follow-up, and intervention. There is also a secure remote viewer for registered providers to retrieve NBS test results.

Clinical Chemistry Specimens Processed and Analyzed

The Clinical Services Branch receives specimens from county health departments, federally qualified health centers, and community-based human immunodeficiency virus (HIV) treatment programs to support the clinical management of their patients. This branch performs routine chemistry profiles, hepatitis screenings, complete blood counts, and CD4/CD8 T-lymphocyte subset enumeration. Analysis is performed by quantitative polymerase chain reaction (PCR) for HIV and hepatitis C (HCV) viral loads and for HIV genotype testing to determine drug resistance. In early 2019, HCV screening and viral load testing were successfully implemented. This branch continues testing for an ongoing hepatitis A outbreak. The Lead Branch conducts testing in support of the department's Childhood Lead Program. However, COVID-19 has affected sample collection efforts, and the completion of verification studies associated with the acquisition of new analytical instrumentation has delayed the testing of environmental samples. The branch processed and analyzed 21,350 specimens during 2020 (Figure 5).

Figure 5. 2020 Chemistry Specimens Processed and Analyzed

Hepatitis
1,700 (12%)

Hematology
1,871 (13.2%)

CD4 Count
1,895 (13.4%)

Clinical Chemistry
1,904 (13.5%)

Blood Lead
4,133 (29%)

HIV Viral Load
1,973 (14%)

■ Environmental Lead **445 (3%)** ■ HIV Genotyping **197 (.01%)**
■ HCV Viral Load **9 (.01%)**

Infectious Disease Testing - Microbiology

Outbreaks: The Emerging Infectious Disease (EID) Branch responded to the COVID-19 crisis and reported Alabama's first confirmed SARS-CoV-2 infection. The branch validated 4 assays across numerous platforms to test over 44,400 samples with 8,243 positive results. Before and during the

response, 422 specimens were tested for Influenza resulting in 151 positive cases. Two hundred forty specimens were tested on a respiratory panel for surveillance. Forty-three resulted positive for rhino/enterovirus, adenovirus, bocavirus, coronavirus NL63, coronavirus 229E, coronavirus OC43, coronavirus HKU1, human metapneumovirus, *Mycoplasma pneumoniae,* parainfluenza 4, and respiratory syncytial virus type A.

As a participant in PulseNet, a national laboratory foodborne illness surveillance network that uses molecular techniques to detect outbreak clusters, EID performed whole genome sequencing on 221 isolates. EID determined Alabama outbreak clusters of *Shigella sonnei, Listeria monocytogenes*, and *Salmonella.* Sample analyses contributing to 14 national outbreaks were posted to the PulseNet International database.

Twenty-nine specimens associated with gastrointestinal outbreaks were analyzed. Of these norovirus, *Clostridium difficile* toxin, enteropathogenic *Escherichia coli, Shigella,* and enteroaggregative *Escherichia coli* were identified. Of the 24 norovirus specimens tested, 11 outbreaks were identified. Twenty-eight bacterial and mycobacterial specimens were identified using 16S sequencing.

For meningococcal disease surveillance, 31 *Haemophilus influenzae* were serotyped and 2 *Neisseria meningitidis* were serogrouped.

Conventional Microbiology worked with CDC and Jefferson County Department of Health on a Gonococcal Isolate Surveillance Project to track antibiotic resistance trends in *Neisseria gonorrhoeae.* One hundred eleven specimens were collected and sent to the Antibiotic Regional Laboratory Network (ARLN) where they were collated and analyzed. This branch also screens for carbapenem resistant *Enterobacteriaceae (CRE), Pseudomonas aeruginosa* and *Acinetobacter baumannii,* and 44 specimens were forwarded to the ARLN for enhanced surveillance. Through this collaborative testing, it was determined that *Klebsiella pneumoniae* carbapenemase-producing bacteria continue to be endemic in the state. CRE is a growing concern in healthcare settings because these multidrug-resistant bacteria can cause serious and difficult-to-treat infections.

Preparedness: The Biological Terrorism Laboratory responded to suspected cases of botulism where one was confirmed as botulinum toxin B. One clinical sample was received to rule out an agent of bioterrorism. *Brucella* was detected.

The Chemical Terrorism (CT) Laboratory participated in one materials inventory, two analyte exposure exercises, and one specimen packaging and shipping exercise in 2020. In addition, the CT Laboratory staff assisted with the COVID-19 response. The CT Section also collaborated with the Office of Radiation Control to acquire equipment in development of an environmental radiation testing program at the new laboratory with hopes of a new Radiation Testing Section becoming operational in 2021.

NBS
State law mandates every newborn be tested for certain metabolic, endocrine, hematological, and other genetic disorders. Initial screening is performed at birth, and a second screening is recommended at 2 to 6 weeks of age. The laboratory screens approximately 150,000 specimens for 48 different disorders translating to about 6 million total tests performed annually. Early identification of a potential disorder makes it possible to provide care for the newborn, often before symptoms appear, and helps ensure these infants receive life-saving treatments.
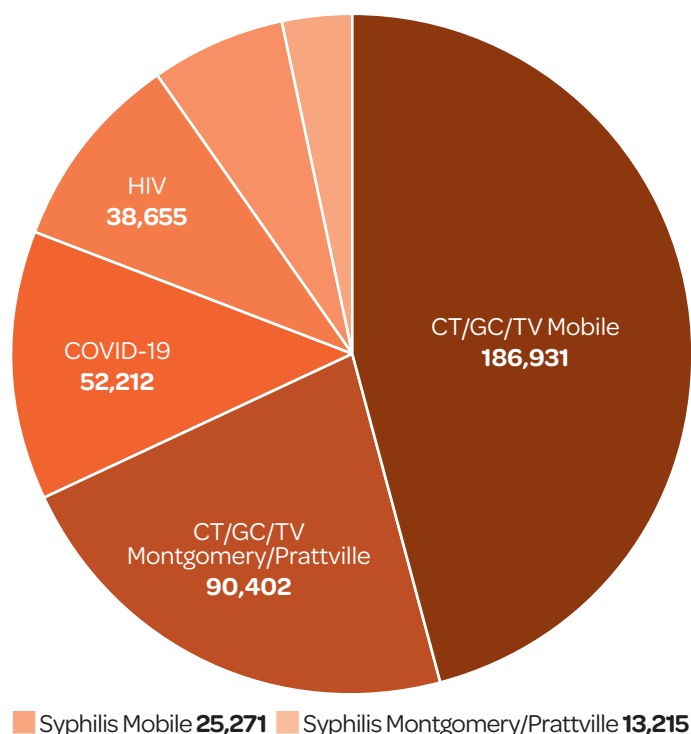
Tuberculosis (TB) and Fungal Infections
The Mycobacteriology Branch received 5,318 specimens for isolation and identification of *Mycobacterium tuberculosis* complex as well as species of non-tuberculous mycobacteria (NTM). Using PCR-based technology, the TB Laboratory can confirm new smear positive patients in 2 hours. The TB Laboratory works with and provides TB Control staff genotyping data generated by the Michigan Department of Community Health. Both this PCR-based technology and genotyping information have been assets during outbreak investigations as they aid in determining their origins. The TB Laboratory uses Matrix Assisted Laser Desorption/Ionization-Time of Flight technology to rapidly identify NTM. The Mycotics Branch reported six endemic yeasts (*Cryptococcus neoformans* and *Cryptococcus* species). A total of 919 specimens were received in this branch from county health departments and private providers. Beginning in May, the branch began testing specimens for COVID-19. The branch tested 1,209 specimens in which 131 tested positive for SARS-CoV-2. This branch supported expedited testing to help mitigate the spread of COVID-19 among department employees.

HIV and STD Testing
The COVID-19 pandemic brought several changes to the STD Division. In May, the division began performing molecular testing for COVID-19. During the height of the 2020 COVID-19 testing response (June through November), Montgomery/Prattville specimens received for *Chlamydia trachomatis, Neisseria gonorrhoeae,* and *Trichomonas vaginalis* (CT-GC-TV) and syphilis testing were forwarded to the Mobile Division Laboratory for testing. This action enabled full utilization of instruments and staff to perform COVID-19 testing at the Montgomery/Prattville Lab. The Montgomery/Prattville STD Division received 52,212 COVID samples with 7,325 (14 percent) testing positive. The incidence rates for chlamydia (9.8 percent), gonorrhea (5.8 percent), trichomoniasis (9.2 percent), syphilis (6.2 percent), and HIV (1.3 percent) showed slight changes for women and men attending adult health and STD clinics. The STD Branch received 132,347 specimens and performed 194,481 tests. (See breakdown in Figures 6 and 7.) CT-GC-TV infections are detected using a nucleic acid test. The Bio-Rad BioPlex 2200 instrument is used to perform multiplex assays for syphilis and HIV testing. The CDC's reverse algorithm is followed for syphilis testing. The initial screening test for syphilis is a multiplex trepomenal IgG/IgM immunoassay test which also produces results for the nontreponemal Rapid Plasma Reagin (RPR) test to determine past or recent infections. Due to FDA requirements, the RPR portion of the assay was removed and the BCL is currently using the Beckman Dickinson RPR manual test for reporting RPR results. The BioPlex 2200 HIV Antigen/Antibody (Ag/Ab) Assay is performed to screen for HIV infections. This multiplex assay produces individual results for HIV 1 Ag, HIV 1 Ab, and HIV 2 Ab. When an HIV screen is positive, an antibody or nucleic acid test is used to confirm the infection.

Figure 6. 2020 Total Results Reported for HIV and STD

- CT/GC/TV Mobile **186,931**
- CT/GC/TV Montgomery/Prattville **90,402**
- COVID-19 **52,212**
- HIV **38,655**

■ Syphilis Mobile **25,271**   ■ Syphilis Montgomery/Prattville **13,215**

Figure 7. 2020 Specimens Received for HIV and STD

- CT/GC/TV Mobile **62,310**
- COVID-19 **52,212**
- HIV **38,040**
- CT/GC/TV Montgomery/Prattville **30,134**
- Syphilis Mobile **25,271**

■ Syphilis Montgomery/Prattville **11,961**
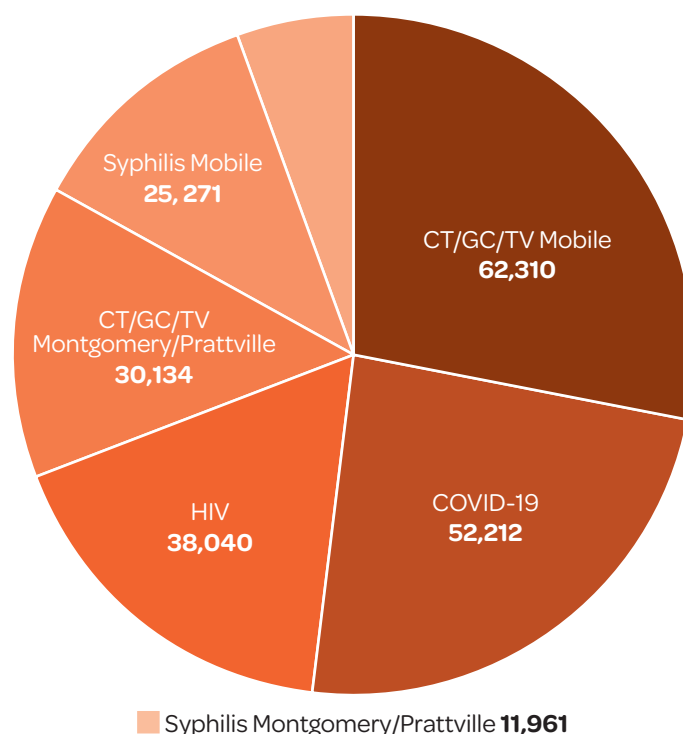
Mobile Division Laboratory

Shellfish/ Beaches Environmental Assessment and Coastal Health (BEACH)/Harmful Marine Phytoplankton Branch

The Mobile Division Laboratory collaborates with the Alabama Department of Environmental Management (ADEM) to meet EPA's BEACH Act requirements. Seven hundred sixty-one samples from coastal waterways were analyzed and reported. The division collaborates with committees of the Interstate Shellfish Sanitation Conference and Gulf of Mexico Alliance to promote laboratory interests in commercial and environmental projects. The laboratory also provides oyster growing water monitoring and harmful algal bloom (HAB) analysis. Laboratorians analyzed and reported results for 423 samples collected from coastal waterways for HAB monitoring. In addition, 404 water samples from oyster growing areas were tested in compliance with National Shellfish Sanitation Program guidelines. Oyster growing and harvest areas require monitoring for bacterial contamination and HAB concentrations to ensure a safe supply of shellfish. In efforts to achieve ISO 17025:2017 accreditation, crab meat analysis for *Escherichia coli* and Listeria continues as the laboratory works to improve methodology through equipment automation. The division received a grant through the Alabama Department of Conservation and Natural Resources to establish a *Karenia brevis* enzyme-linked immunosorbent assay confirmation method.

Mobile Division Clinical Branch

The Mobile Clinical Branch also performs CT-GC-TV and syphilis testing with the same instrumentation and methods as does the STD Division. The laboratory performed 163,679 tests for CT-GC-TV and tested 27,662 specimens for syphilis. The increase is due to specimens received from the Montgomery/Prattville STD Division as its staff and instruments were devoted to COVID-19 testing. The Urine Culture and Sensitivity Branch analyzed 474

specimens for pathogens and antimicrobial sensitivity. The division completed participation in an automated RPR study to determine performance characteristics among various instrument platforms. Funding was provided by the Association of Public Health Laboratories and the CDC.

Mobile Division Environmental Testing

The Drinking Water Section tested 5,140 samples from public systems and private wells in support of the Safe Water Act under contract with ADEM.

Sanitary Bacteriology/Media Division

The Sanitary Bacteriology/Media Division tests dairy products, public and private water, and fluoride samples as well as prepares media used by both the county health departments and the BCL. Testing was conducted on 1,473 dairy samples to include raw producer, tank truck, and finished dairy products. Testing was performed on 890 fluoride samples. The laboratory provides proficiency testing for the milk laboratories in the state. Working with the FDA, five milk laboratories were inspected for compliance with state and federal regulations. The laboratory tested 3,118 public and private water samples in support of the Safe Water Act. While continuing work with ADEM, 13 public water utility laboratories were inspected for compliance with state and federal regulations. The Media Branch made 154,000 liters of media in support of the NBS, Microbiology, Milk and Water, Mycology, TB, and EID programs.

Rabies

Mobile and Montgomery laboratories both test animals for rabies. Of the 1,449 animals received for testing, 46 were positive for the rabies virus. Notably, the presence of a positive donkey and multiple positive fox, skunk, and raccoon specimens generated significant public health interest.

BUREAU OF COMMUNICABLE DISEASE

The bureau's mission is to prevent and control designated communicable diseases and illnesses in Alabama. The bureau consists of the following divisions: Immunization (IMM), Infectious Diseases and Outbreaks (ID&O), Sexually Transmitted Diseases (STD), and Tuberculosis (TB) Control.

IMM

The IMM Division goal is to reduce vaccine-preventable diseases and increase immunization rates. The division has four branches: Surveillance, Registry (ImmPRINT), Vaccines for Children (VFC) and Immunization Quality Improvement Program (IQIP), and Administration.

The Surveillance Branch conducts the Alabama School Survey, in conjunction with the Alabama Department of Education and private schools. This survey evaluates the immunization status of all children to ensure they have a current Certificate of Immunization (COI) or a valid exemption on file in compliance with the 2009 School Immunization Law and Rules. In the 2019-2020 Annual School Entry Survey, all medical and religious exemptions combined continue to be less than 1 percent (0.73) for students in public and private schools. The percent of students with expired and no COI was 4.49, a decrease from the previous year by 1.11. In addition, the branch oversees vaccine-preventable disease investigations statewide. IMM district staff

investigate vaccine-preventable disease reports submitted by notifiable disease reporters and laboratories. In 2020, the IMM district staff investigated and confirmed 1,396 cases of diseases. In addition, they investigated 7 outbreaks; 5 pertussis, 1 varicella, and 1 large ongoing hepatitis A outbreak. The outbreak started in 2018 and continues. As of December 31, 2020, there were 1,218 confirmed cases in 51 counties across Alabama.

The VFC Branch manages Alabama's VFC Program, a federal entitlement program that provides vaccine at no cost to providers who see children under 19 years of age who are uninsured, Medicaid-eligible, under-insured, American Indian, or Alaskan Native. As of December 2020, 502 enrolled public and private providers received approximately $70 million worth of vaccines. As part of the vaccines distributed, the VFC Program provided 187,770 doses of seasonal influenza vaccine to providers in all 67 counties. IMM district staff perform regulatory VFC site visits and IQIP assessment visits on 50 percent of enrolled providers to promote proper vaccine storage and handling, accurate and safe administration of vaccine, and vaccine coverage improvement. The branch also manages the federal Section 317 funding for vaccines for uninsured/under-insured adults. As of December 2020, the branch distributed over $278,000 (9,020 doses) of 317-funded adult Hepatitis A vaccine to providers throughout the state for use during a hepatitis A outbreak. The branch also distributed over $138,000 (10,360 doses) of 317-funded influenza vaccine that was used for mass vaccination planning for COVID-19 vaccine.

The Registry Branch manages the state's immunization registry, ImmPRINT, for all residents of Alabama. Sites can submit vaccine information manually or by electronic interface. The

Figure 8. Cases Classified As Vaccine-Preventable Disease Cases in Alabama*

Disease	2016	2017	2018	2019	2020
Diphtheria	0	0	0	0	1
H. influenzae	79	86	127	119	46
Hepatitis A	-	21	40	225	922
Hepatitis B, acute	-	21	40	64	48
Measles	0	1	0	0	0
Meningococcal	5	4	5	3	3
Mumps	2	35	17	15	0
Perinatal Hepatitis B	0	0	0	0	0
Pertussis	165	226	225	220	153
Polio	0	0	0	0	0
Rubella	0	1	0	0	1
Strep. pneumoniae	341	375	554	372	273
Tetanus	1	1	0	0	0
Varicella	100	93	93	85	17
Total	**693**	**864**	**1,101**	**1,103**	**1,464**

*Preliminary counts as of February 16, 2021

Figure 9. Number of Vaccines Submitted to ImmPRINT

Year	Source	Number of Vaccine Submitted	Grand Total
2015	Manual	304,407	1,439,168
	Interface	1,134,761	
2016	Manual	453,800	1,846,835
	Interface	1,393,035	
2017	Manual	436,133	2,067,434
	Interface	1,631,301	
2018	Manual	410,401	1,906,688
	Interface	1,496,287	
2019	Manual	1,904,806	4,012,717
	Interface	2,107,911	
2020	Manual	1,337,078	3,978,095
	Interface	2,641,017	

Figure 10. Number of Active Sites Recorded in ImmPRINT

Year	Source	County Health Department	Clinic	FQHC/RHC	Hospital	Pharmacy	Schools	Childcare Center	Sub-Total	Grand Total
2015	Manual	68	432	68	23	36	546	2	1,175	3,532
	Interface	7	595	86	56	333	0	0	1,077	
2016	Manual	69	571	78	27	60	1,578	3	2,386	3,489
	Interface	5	606	86	60	346	0	0	1,103	
2017	Manual	71	685	86	34	109	1,664	242	2,891	4,057
	Interface	5	655	89	63	354	0	0	1,166	
2018	Manual	71	801	98	41	241	1,701	339	3,292	4,572
	Interface	4	720	99	66	391	0	0	1,280	
2019	Manual	39	818	88	38	304	1627	314	3,228	4,623
	Interface	37	648	106	62	542	0	0	1,395	
2020	Manual	71	761	145	77	404	853	0	2,311	3,551
	Interface	63	463	89	55	570	0	0	1,240	

Registry Branch coordinates the interfaces between ImmPRINT and providers' electronic medical record who submit vaccine information, which includes bi-directional (2-way) communication. In 2020, there were over 3,500 providers who were actively submitting vaccine information into ImmPRINT, with approximately 4 million vaccinations submitted during that time period. More than 5 million patients of all ages and over 67 million vaccine doses are recorded in ImmPRINT. ImmPRINT is also the system in which COVID-19 vaccine providers are enrolled and submitted COVID-19 vaccine orders in 2020.

The Administration Branch manages state and federal budgets with over 50 staff statewide, including contracts, grants, payroll, leave, and personnel.

COVID-19 Pandemic
At the outset of the COVID-19 pandemic, IMM staff assisted the ID&O Division with contact tracing activities until a vaccine could be developed and would be ready to disseminate. In September and October, the COVID-19 Vaccination Plan was submitted to the CDC and the division prepared for the distribution of vaccine through the ImmPRINT system. In December, Alabama started vaccinating healthcare workers, first responders, and persons over 75 years of age. More than 46,000 COVID-19 vaccine doses were administered.

ID&O
The mission of ID&O is to protect the health of Alabama residents by monitoring and investigating select infectious, zoonotic, and environmental diseases and events. Figure 11 demonstrates the number of disease reports that were counted as cases according to the criteria established by the Council of State and Territorial Epidemiologists and the CDC in 2020 as compared to the previous 4 years.

Outbreak Investigations
ID&O defines an outbreak as the occurrence of more cases of disease than expected in a given area or among a specific group of people over a particular period of time linked to a common exposure; a cluster is defined similarly, except a common exposure is not identified. Single cases or exposures related to certain rare and serious conditions, such as gastrointestinal anthrax, botulism, rabies, or healthcare-associated *Legionella*, may illicit an outbreak-like response. All reporters, as outlined in the Notifiable Disease Rules, are required to report outbreaks of any kind within 24 hours of presumption. In 2020, 647 outbreaks and clusters were investigated. All but 47 were respiratory. Interdisciplinary, collaborative efforts among state and federal partners aided in the identification of causative agents, likely modes of transmission, and underlying environmental causes of illness. ID&O's response to the COVID-19 pandemic is described below.

COVID-19 Pandemic Response
In November 2019, a novel coronavirus (SARS-CoV-2) was discovered in Wuhan, China. In December, the department began gathering information and planning for a possible epidemic of large-scale proportions. In January 2020, large-scale monitoring of international travelers began, and in March, Alabama announced its first positive case of COVID-19. As a result, ID&O, with support from the department, implemented the following activities:

- Investigation of positive cases
- Contact tracing
- Data collection
- Analyzing and visualizing data
- Reporting to local, state, and national platforms
- Monitoring and responding to long-term care facility and school outbreaks
- Mining data for outbreaks and clusters
- Conducting death investigations
- Providing quarantine orders and guidance to the public and healthcare partners

Alabama reported 368,179 cases and 4,841 deaths associated with COVID-19 in 2020. These data represent the largest outbreak of a single disease in over 100 years in Alabama. COVID-19 outbreaks, clusters, deaths, and investigations were most of the focus for ID&O in the year 2020, overshadowing every other infectious disease in the state.

Figure 11. Select Alabama Notifiable Disease Case Counts, by Year[*]

Diseases	2016	2017	2018	2019	2020
Acute Flaccid Myelitis	--	--	--	0^	0
Anthrax	0	0	0^	0	0
Arboviral Diseases (excludes Chikungunya Virus, Dengue, and Zika Virus)	18^	62	28	6	8
Babesiosis	0	1	0	0	1
Botulism	1	0	0	1	1
Brucellosis	0	0	1	4	1
Campylobacteriosis	692	790	783	754	657
Chikungunya Virus	1^	1	0	0	0
Cholera	0	0	0	0	0
Coccidioidomycosis	--	--	--	9	5
Cryptosporidiosis	334	189	152	225	137
Cyclosporiasis	--	--	--	5	3
Dengue	5	0	2	3	0
E. coli, Shiga Toxin-producing (includes O157: H7)	39	31	129^	138	98
Ehrlichiosis/Anaplasmosis	21	17	24	39	12
Giardiasis	234	191	217	164	128
Hansen's Disease (Leprosy)	1	1	0	1	1
Hantavirus Pulmonary Syndrome	--	--	--	0	0
Hemolytic Uremic Syndrome (HUS)	6	0	3	6	3
Hepatitis E, Acute	0	0	0	0	0
Influenza-associated Non-pediatric Mortality	--	--	257	93	19
Influenza-associated Pediatric Mortality	0	1	2	2	1
Legionellosis	63	66	76	72^	57
Leptospirosis	0	0	1	0	0
Listeriosis	8	5	11^	7	13
Lyme Disease	38	39^	36	66	15
Malaria	10	8	9	9	2
Novel Coronavirus	--	--	--	--	368,179^
Novel Influenza A Virus Infection	0	0	0	0	0
Paratyphoid Fever	9	3	6^	0^	2
Plague	0	0	0	0	0^
Psittacosis	0	0	0	0	0
Q Fever	1	0	2	2	0
Rabies, Animal	77	51	55	50	50
Rabies, Human	0	0	0	0	0
Salmonellosis	1,276	1,129^	1,198^	1,001	873
Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV)	0	0	0	0	0
Shigellosis	239	247^	320	431	340
Smallpox	0	0	0	0	0
Spotted Fever Rickettsiosis	453	671	673	476^	89
Toxic Shock Syndrome (Non-streptococcal)	--	--	--	0	0
Trichinellosis (Trichinosis)	0	0	0	0	0
Tularemia	1	1^	0	4	1
Typhoid Fever	0	1	1	0	1
Vibriosis (Non-cholera)	31	26^	38	41	20
Viral Hemorrhagic Fever	0	0	0	0	0
VISA (Staphylococcus aureus, Vancomycin-Intermediate)	3	4	1	1	0
VRSA (Staphylococcus aureus, Vancomycin-Resistant)	0	0	0	2	1
Yellow Fever	0	0	0	0	0
Zika Virus	41^	4	3	0	0
Other Investigations	0	0	0	3	0
Total	**3,602**	**3,539**	**4,028**	**3,615**	**370,718**

[*]Preliminary counts include finalized investigations among Alabama residents as of January 9, 2021. These case counts do not include those for conditions investigated by other divisions.
[†]The other investigations category includes a variety of conditions or events that have been investigated but are not reportable in Alabama or do not fall into any other category (such as histoplasmosis, streptococcal toxic-shock syndrome, yersiniosis).
[^]The case definition was updated this year for this condition.

Arboviral (Mosquito-borne) Surveillance

In 2020, ID&O investigated 22 reports of suspected human arboviral illness; of which, 36 percent were determined to be cases. The majority of investigations were for West Nile virus (WNV). All eight cases identified were WNV and no cases associated with dengue, Eastern Equine encephalitis (EEE), or Zika virus were identified. WNV and other endemic arboviruses, including EEE, and St. Louis encephalitis, remain an ongoing threat to Alabamians.

Figure 12. Human Arboviral Investigations and Cases in Alabama, 2020*

Arboviral Disease	Investigations	Cases
California Encephalitis	1	0
Chikungunya	0	0
Dengue (All Travel-related)	0	0
Eastern Equine Encephalitis	1	0
Jamestown Canyon	0	0
La Crosse Encephalitis	1	0
Powassan	0	0
St. Louis Encephalitis	1	0
West Nile Virus	16	8
Yellow Fever	0	0
Zika Virus	1	0
Total	**22**	**8**

*As of February 1, 2021

Influenza Activity

According to the CDC, the 2019-20 season was described as having moderate severity. CDC estimates that the burden of illness during the 2019–2020 influenza season was moderate based on an estimated 38 million people becoming sick, 18 million visits to a healthcare provider, 400,000 hospitalizations, and 22,000 deaths from influenza. Near the end of September 2019, statewide influenza-like illness (ILI) was below the ILI baseline (3.19 percent) at 1.90 percent. At the beginning of November, statewide ILI increased above the ILI baseline to 3.47 percent. The ILI percentage remained above the 3.19 percent threshold and continued to increase during the season. ILI activity peaked during mid-January (9.04 percent) and early February (9.34 percent). In addition to ILI surveillance, the strains most frequently detected were influenza A (H1N1), influenza A (H3N2), influenza B, and influenza B (Victoria).

On March 13, the department reported the first case of COVID-19, which may have a similar presentation to ILI. On April 3, the State Health Officer issued a stay-at-home order and strict quarantine requirements. The surveillance of COVID-19 became the top priority, which resulted in a decrease in ILI outpatient visits and subsequent increase in COVID-19-like illness being reported.

Lastly, there were seven non-pediatric influenza-associated deaths and one pediatric influenza-related death reported during the season. Using the U.S. Outpatient ILI Surveillance Network, healthcare providers submitted a weekly report of the percentage of patients with ILI. These data were used to measure ILI activity and to assess geographic spread of influenza across the state. These data are also used to help determine which influenza strains should be included in the seasonal vaccine and detecting rare events such as novel influenza or antiviral resistance.

Healthcare-Associated Infections

Alabama remains committed to reducing HAIs in its hospitals. Alabama hospitals began reporting four infection measures to the department in 2011: catheter-associated urinary tract infections (CAUTIs), central line-associated bloodstream infections (CLABSIs), surgical site infections (SSIs) associated with colon surgeries, and SSIs associated with abdominal hysterectomies. These data represent Alabama's ninth year of reporting infection measures. In 2019, Alabama hospitals had significantly fewer CAUTIs, CLABSIs, and colon SSIs than predicted using national baseline data. SSI counts for abdominal hysterectomies were statistically similar to the numbers predicted.

Rabies

In 2020, the department investigated 6,582 potential rabies exposures. The BCL performed 1,430 rabies tests, and ID&O confirmed 50 animal rabies cases. Of the confirmed cases, 92 percent were identified in wild animals (including bats, foxes, raccoons, and skunks) and 8 percent were identified in domestic animals (including cats, dogs, and donkeys). Animal case counts include animals tested at the BCL, as well as positives reported from the U.S. Department of Agriculture Wildlife Services. News releases were issued when positive cases occurred to provide education about rabies in wildlife and highlight the importance of vaccination of domestic animals.
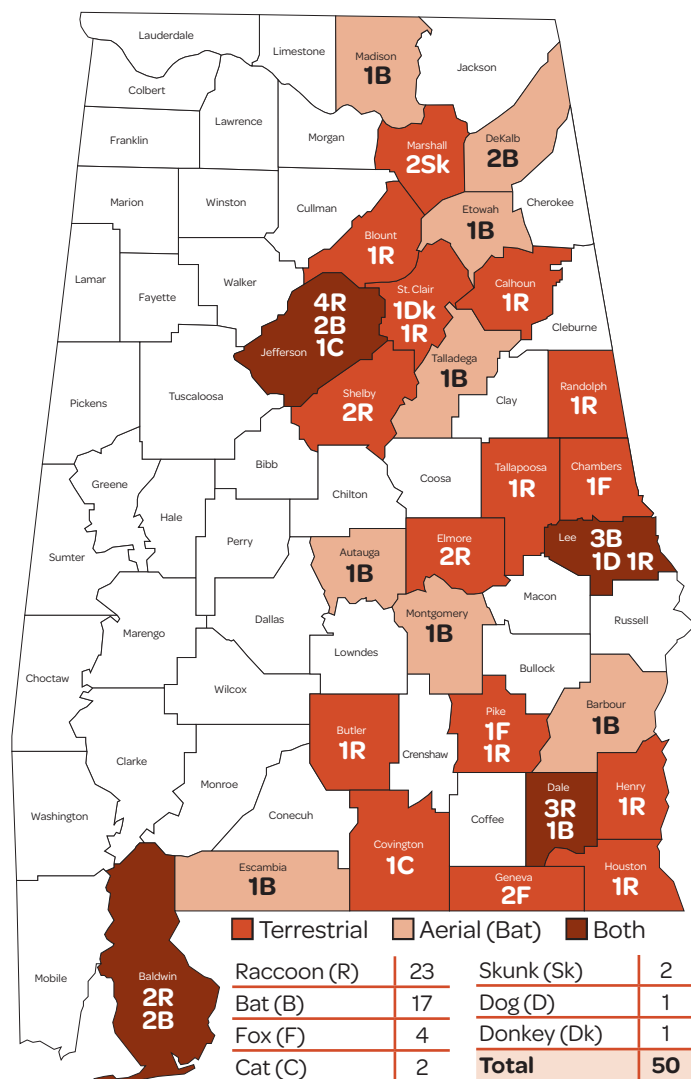
STD

Primary and Secondary Syphilis

In 2020, the department received reports of an estimated 435 cases of primary and secondary syphilis infection. This case count corresponds to a rate of 8.9 cases per 100,000 population. The case count is indicative of declining primary and secondary syphilis infection and also represents a decline in patient access to testing as a result of the COVID-19 pandemic.

Congenital Syphilis

In 2020, the department received 20 reported cases of probable congenital syphilis. The report represents a 43 percent increase in reported congenital syphilis cases from 14 in 2019 to 20 in 2020. Alabama saw a 100 percent increase in reported congenital syphilis cases between 2018 and 2019. The trend shows a 143 percent increase in 2 years at a rate of 24.2 congenital syphilis cases per 100,000 live births. To stop the increasing number of cases, prenatal screening is recommended for syphilis in all pregnant women during the initial prenatal visit, at 28 to 32 weeks' gestation, and before delivery. According to the CDC, obstetricians must treat pregnant women with a positive syphilis test at least 30 days before delivery to prevent maternal transmission.

Figure 13. Reported ID&O Confirmed Animal Rabies Cases in Alabama, 2020

Map county labels with case counts:
- Madison: 1B
- Marshall: 2Sk
- DeKalb: 2B
- Etowah: 1B
- Blount: 1R
- St. Clair: 1Dk 1R
- Calhoun: 1R
- Jefferson: 4R 2B 1C
- Talladega: 1B
- Shelby: 2R
- Randolph: 1R
- Tallapoosa: 1R
- Chambers: 1F
- Elmore: 2R
- Lee: 3B 1D 1R
- Autauga: 1B
- Montgomery: 1B
- Butler: 1R
- Pike: 1F 1R
- Barbour: 1B
- Dale: 3R 1B
- Henry: 1R
- Covington: 1C
- Escambia: 1B
- Geneva: 2F
- Houston: 1R
- Baldwin: 2R 2B

Legend: Terrestrial | Aerial (Bat) | Both

Raccoon (R)	23	Skunk (Sk)	2
Bat (B)	17	Dog (D)	1
Fox (F)	4	Donkey (Dk)	1
Cat (C)	2	**Total**	**50**

Figure 14. Primary and Secondary Syphilis Cases, Alabama 2011–2020*

Number of Cases (bars) / Diagnosis Rate per 100,000 (line):
- 2011: 222 cases, 4.6
- 2012: 218 cases, 4.5
- 2013: 185 cases, 3.8
- 2014: 164 cases, 3.4
- 2015: 291 cases, 6.0
- 2016: 369 cases, 7.6
- 2017: 402 cases, 8.2
- 2018: 464 cases, 9.5
- 2019: 614 cases, 12.5
- 2020*: 435 cases, 8.9

■ Number of Cases ● Diagnosis Rate per 100,000
*Total 2020 case counts will not be finalized until June 2021.

Figure 15. Chlamydia Cases, Alabama 2011–2020*

Number of Cases (bars) / Diagnosis Rate per 100,000 (line):
- 2011: 611.6
- 2012: 30,943 cases, 642.3
- 2013: 29,646 cases, 613.3
- 2014: 28,655 cases, 590.9
- 2015: 26,493 cases, 545.2
- 2016: 26,390 cases, 542.6
- 2017: 29,994 cases, 615.3
- 2018: 29,745 cases, 610.2
- 2019: 31,143 cases, 635.2
- 2020*: 21,373 cases, 435.9

■ Number of Cases ● Diagnosis Rate per 100,000
*Total 2020 case counts will not be finalized until June 2021.

Chlamydia

In 2020*, a total of 21,373 cases of *Chlamydia trachomatis* infection were reported. This case count equals a rate of 435.9 cases per 100,000 population. The 31 percent decline in chlamydia cases emphasizes the impact COVID-19 had on Alabama's STD morbidity and patient access to testing.
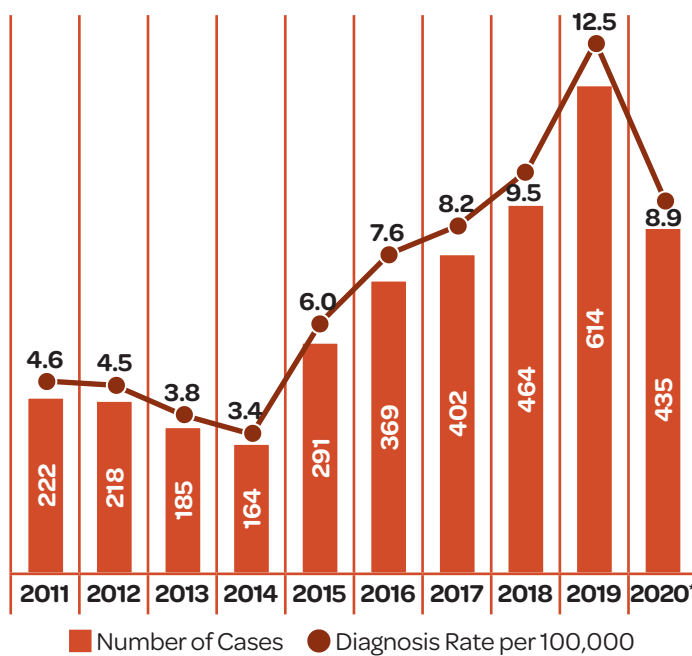
In 2020*, the overall rate of chlamydial infection in Alabama was higher among females at 569.5 cases per 100,000 females compared to males at 296.0 cases per 100,000 males.

The rate of reported chlamydia cases remained highest among blacks (598.8 cases per 100,000 population), followed by Hispanics (215.6 cases per 100,000 population), and whites (80.0 cases per 100,000 population).

Fifty-three percent of the chlamydia cases reported in 2020* were residents of Jefferson (4,236 cases), Mobile (2,389 cases), Madison (1,954 cases), Montgomery (1,730 cases), and Tuscaloosa (1,032 cases) counties.
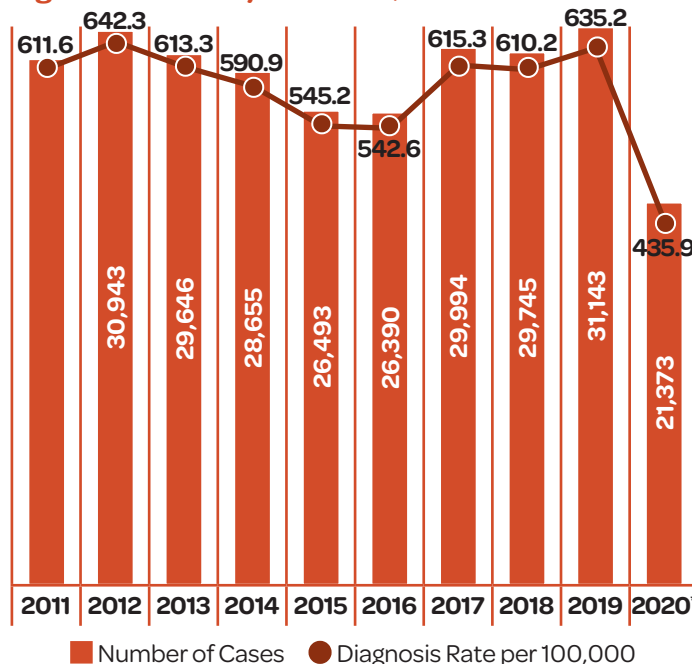
Persons age 20-24, and age 15-19 accounted for 37.7 percent and 29.7 percent of the chlamydia cases reported in 2020*,

respectively, which demonstrates the need to engage adolescents and young adults in discussions on sexual health topics.

Gonorrhea

In 2020*, a total of 10,899 cases of *Neisseria gonorrhoeae* infection were reported. This case count corresponds to a rate of 222.3 cases per 100,000 population. The number of reported gonorrhea cases decreased by nearly 25 percent from the previous year. This decrease is a direct result of the COVID-19 pandemic's impact on patient access to testing.

Figure 16. Gonorrhea Cases, Alabama 2011-2020*

Number of Cases ■ Diagnosis Rate per 100,000

*Total 2020 case counts will not be finalized until June 2021.
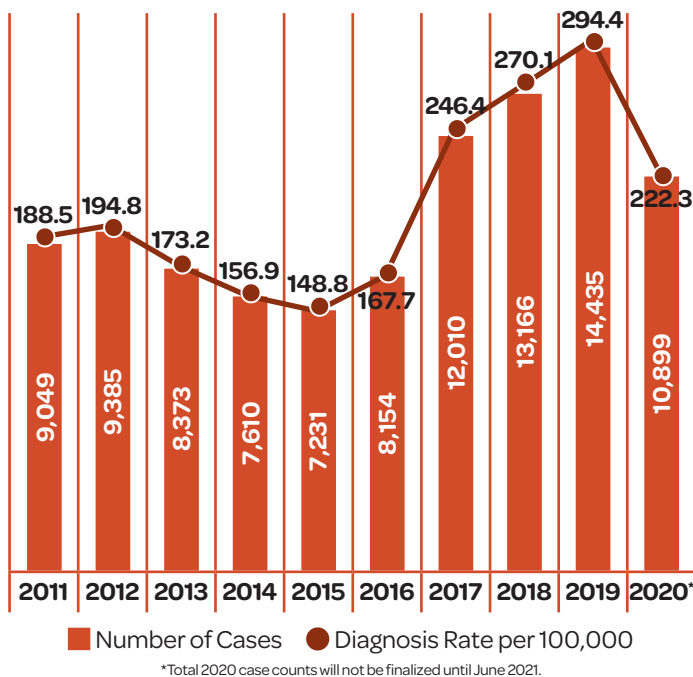
In 2020*, the rate of reported gonorrhea cases remained highest among blacks (394.3 cases per 100,000 population), followed by Hispanics (57.8 cases per 100,000 population), and whites (45.0 cases per 100,000 population).

Males represented approximately 53 percent of the reported gonorrhea cases compared to females at 47 percent.

Nearly 57 percent of the gonorrhea cases reported in 2020* were residents of Jefferson (2,446 cases), Mobile (1,128 cases), Madison (1,088 cases), Montgomery (866 cases), and Tuscaloosa (644 cases) counties.

Persons age 20-24, persons age 15-19, and persons age 25-29 accounted for 31.5 percent, 21.3 percent, and 20.5 percent of the gonorrhea cases reported in 2020*, respectively.

TB Control

The ultimate goal of the Division of TB Control is to eliminate TB in Alabama. Until that goal is reached, the division strives to reduce the annual burden of disease, limit transmission, and prevent future cases through the provision of diagnostic, treatment, case management, and contact investigation activities. The division provides these services to all persons in Alabama regardless of the ability to pay. This commitment to the citizens of Alabama has contributed to a historic decline in morbidity.

In 2020, the division evaluated 122 persons suspected of having TB, eventually ruling out disease in 47 suspects and confirming active TB disease in 75 patients. Figure 17 represents a 13.79 percent decrease in confirmed cases compared to 87 cases in 2019.

The 10-year trend in confirmed active cases of TB, as illustrated, reveals an overall decline of 48.6 percent in verified TB cases (from 2010 to 2020). However, morbidity reported over the past 5 years has demonstrated far less progress in the continuing steady decline of reported TB cases. Since 2015, when Alabama reported 119 cases, TB cases have remained relatively steady until 2020. Cases increased in one of the previous 5 years. During the past 5 years, Alabama reported an average of 97 cases per year, a 22-case decrease compared to cases reported in 2015. The decrease in TB cases noted in 2020 may be the result of undertesting and underreporting caused by a lack of patient access to care due to the COVID-19 pandemic.

In addition to the identification, evaluation, and treatment of persons with active TB, the division seeks to prevent future cases through prompt identification and medical evaluation of contacts at risk for exposure, and to assure the initiation and completion of preventive therapy for those contacts diagnosed with latent TB infection (LTBI). Preliminary data for 2020 shows that 2,300 persons were identified as contacts to TB cases classified as Acid Fast Bacilli (AFB) sputum smear positive cases, and that 2,112 (92 percent) of those contacts were fully evaluated. Of the number of persons who were fully evaluated, initial reports indicate that 31 of 39 (79 percent) persons were diagnosed with LTBI and were placed on preventive treatment for LTBI by district staff.

The division continues to place great emphasis on the identification of persons at high risk for progression to active TB disease. Some groups of persons who are diagnosed with LTBI infection are at increased risk for rapid progression to TB disease including persons who are close contacts to AFB smear positive cases; individuals diagnosed with certain immunocompromising medical conditions such as HIV, diabetes, and others; persons who are foreign-born from countries with a high prevalence of TB (immigrants or refugees); and persons who abuse drugs and alcohol. Treating these persons preventively protects the individual and the community at large from developing TB disease.

Figure 17. TB in Alabama - 2010 through 2020
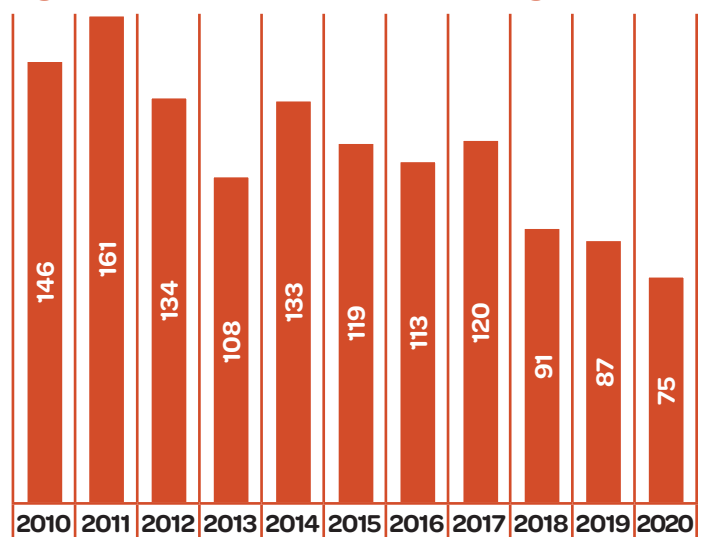
OFFICE OF EMERGENCY MEDICAL SERVICES (OEMS)

The OEMS is responsible for protecting the health, safety, and welfare of the public by assuring that emergency medical services (EMS) provided by response agencies, training entities, and technicians meet or exceed established standards. The office investigates complaints and may exercise its authority to deny, place on probation, suspend, or revoke licensure when statutory or regulatory violation is substantiated.

Figure 18. EMS Personnel – Personnel Licensed by OEMS by License Type

License Type	Number of Personnel
Advanced Emergency Medical Technician (EMT)	998
Emergency Medical Responder	72
Emergency Medical Technician	6,337
Intermediate	223
Paramedic	5,167
Critical Care Paramedic	183
Total	**12,980**

Alabama Acute Health Systems

Trauma System
The Alabama Trauma System currently consists of 61 trauma centers, including out-of-state trauma centers. The efforts and dedication of trauma centers, EMS, the Alabama Trauma Communications Center, regional EMS, and state and regional councils working together, facilitates timely routing of trauma patients to the appropriate hospitals.

In 2020, 14,172 patients were entered into the trauma system. The most common mechanism of injury was motor vehicle related.

Alabama Head and Spinal Cord Injury Registry/ Alabama Trauma Registry
During 2020, the database used for the Alabama Head and Spinal Cord Injury Registry and the Alabama Trauma Registry (ATR) was updated. The data is collected for two specific purposes: one of which is to provide information to the Alabama Department of Rehabilitation Services so the agency can contact patients to provide information on services that patients may be eligible to receive related to a head and/or spinal cord injury; secondly, the ATR data collected from the trauma centers is used for system quality improvement.

Stroke System
The Alabama Stroke System was activated statewide on October 30, 2017. The primary goal of the stroke system is to maintain a stroke emergency care system that results in 100 percent tPA (tissue plasminogen activator) administration to all eligible patients as well as decreased stroke mortality and disability. Patients who are experiencing symptoms of a stroke need to be rapidly evaluated at a hospital and treated to either reverse the stroke or minimize the damage, if possible. Because tPA must be administered within the first few hours of acute ischemic stroke onset, the system will improve the chances of survival regardless of proximity to an urban stroke center.

During 2020, 8,290 patients were entered into the stroke system. Of the 2,206 patients with ischemic stroke, 502 received tPA (23 percent); and 547 patients entered into the system had hemorrhagic strokes.

The Alabama Stroke System includes 80 stroke centers, including out-of-state partners. The three designation levels of stroke centers in the stroke system are stroke ready center, primary stroke center, and comprehensive stroke center. The department continues to work with stroke professionals to develop additional treatment center designation criteria to assist in getting the patient to the appropriate stroke center for rapid evaluation and treatment.
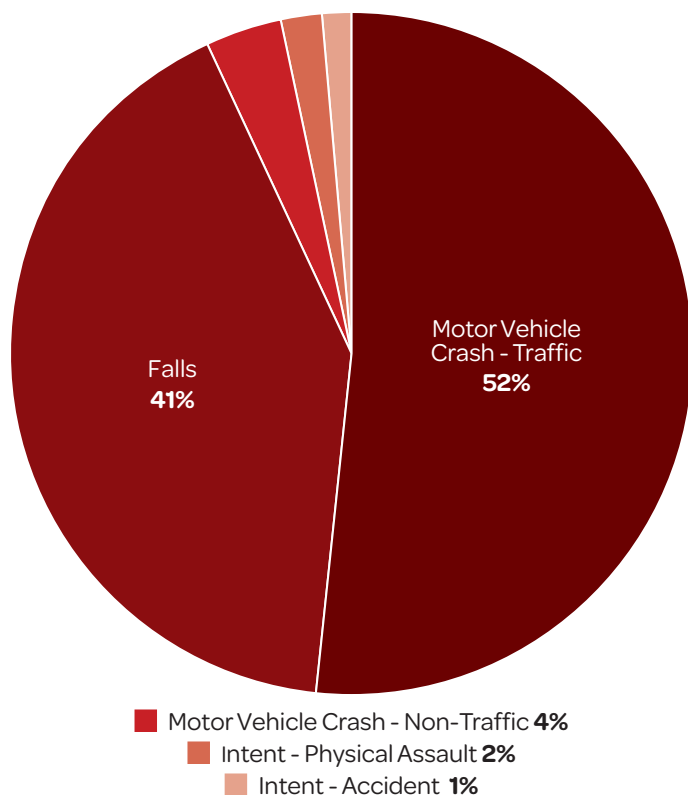
Cardiac System
The Cardiac Arrest Resuscitation to Enhance Survival (CARES) Registry helps EMS measure performance and identify how to improve cardiac arrest survival rates. EMS providers and hospitals across the state provide data. From January 1, 2020 – December 31, 2020, 30 EMS agencies registered in CARES entered 346 events. Of the 346 events, 239 (36.4 percent) had bystander cardiopulmonary resuscitation with an automated external defibrillator used in 22 (13.6 percent) of the bystander events.

EMS Education
Due to COVID-19, keeping schools and EMS certification exams open in any format was the highlight of the Education Branch in 2020. All aspects of EMS education including the Committee on Accreditation of Educational Programs for the EMS Professions, the National Registry of Emergency Medical Technicians, the OEMS, and local education programs made concessions and exceptions to ensure the continuous flow of education for prehospital personnel. After almost a year of this new normal, education programs have begun to settle into a combination of virtual and classroom lectures and labs.

With the Alabama Gulf EMS System taking the lead, an EMS instructor course has been created that is completely free of charge and conducted virtually via a cloud-based video and audio system. Assignments are submitted through e-mail or are discussed during class sessions. The first of these courses is currently being conducted with approximately 22 enrollees.

Figure 19. Five Most Common Causes of Injury in 2020 (Children Age 0 to 18 Years Old)

Motor Vehicle Crash - Traffic **52%**
Falls **41%**

■ Motor Vehicle Crash - Non-Traffic **4%**
■ Intent - Physical Assault **2%**
■ Intent - Accident **1%**

Figure 20. Five Most Common Primary Impression Criteria

Primary Impression Type	Count of Events
General/Other – Weakness	134,334
Cognitive Functions/Awareness – Altered Mental Status	39,036
Respiratory – Respiratory Distress, Acute	19,223
Pain – Acute Pain, not elsewhere classified	19,187
Pain-Chest (Cardiac)	17,534

Alabama Emergency Medical Services for Children (EMSC)

The mission of the EMSC Program is to prevent and reduce child, youth, and adolescent disabilities and deaths that are the result of severe illness and injury. Several services are available through the program including education for prehospital professionals; continual permanent installation of the EMSC Program into Alabama's EMS system; and assurance that pediatric equipment, according to the American Academy of Pediatrics/American College of Emergency Physicians guidelines, is available on prehospital emergency vehicles that transport children.

Alabama Opioid Assistance Project

The Substance Abuse and Mental Health Services Administration has awarded a continuation of the First Responders–Comprehensive Addiction and Recovery Act grant for FY2021 to the OEMS. The grant will continue to be used to assist in supplying naloxone to EMS providers licensed in the state of Alabama and to gather research and data on naloxone use statewide. The project provides training and naloxone assistance to EMS and peer recovery support and referral to opioid overdose victims and their families. The office has combined its efforts with the Council on Substance Abuse in Alabama to provide data collection and referral assistance when the patient arrives at the receiving facility. The project has been expanded to include training and educational programs in communities and schools and a marketing campaign was deployed for public awareness.

BUREAU OF ENVIRONMENTAL SERVICES

The Bureau of Environmental Services ensures the wellness and safety of Alabamians by regulating food service establishments, milk production, lodging facilities, seafood production, onsite sewage disposal and soil mapping, solid waste disposal, vector control, and indoor air quality and home lead inspections.

Environmental Operations Unit

This unit creates the infrastructure for the bureau by ensuring that the bureau performs proficiently, effectively, and professionally by developing environmental guidelines, policies, and performance standards that measure the efficiency and productivity of the state's environmental programs. The unit also serves as a facilitator for the bureau by providing structured training through workshops, seminars, and conferences for bureau and county personnel. By serving as a "checkpoint" for the bureau, local environmentalists are kept abreast of new and innovative technology, and are provided professional development seminars.

Food, Milk, and Lodging

Food and Lodging Branch

• 35,357 inspections were conducted at food establishments, and 2,660 complaints received from the public concerning food establishments were investigated. Additionally, 176 emergency closure orders were issued for sanitation imminent health hazards and 55 emergency closure orders were issued for violation of the COVID-19 safer at home order.

• 1,093 lodging inspections were conducted, and 244 complaints received from the public concerning hotels were investigated. Eleven emergency closure orders were issued to hotels, all for rooms with bed bug infestations.

• 307 body art facility inspections were conducted, and 27 complaints received from the public concerning body art facilities were investigated.

Milk and Food Processing Branch

• 1,547 samples of milk were reviewed and documented on samples collected for laboratory analysis for bacterial contamination and the presence of antibiotic residue.

• 125 dairy farm inspections and 162 milk processing plant inspections were conducted.

• 836 certificates of free sale were issued for shipments of food products manufactured in Alabama and shipped to overseas markets.

Seafood Branch

• Collected and analyzed 279 water samples in shellfish growing areas of Mobile Bay.

• Conducted 175 inspections of oyster, crab, and other seafood processing plants; 31 samples of oysters or crabmeat were collected for laboratory analysis.

Community Environmental Protection

The Soil and Onsite Sewage Branch's main objective is to coordinate the onsite sewage program in county health departments. The division carries out programs to minimize the adverse effects of disposal of sewage and high-strength sewage on human health and the environment by establishing and enforcing requirements for the design, permitting, installation, approval, and use of onsite sewage treatment and disposal systems.

The Onsite Sewage Branch issued 13,261 permits to install and repair onsite sewage systems; 6,423 were installed, and 6,340 onsite sewage systems were issued an approval for use.

The Solid Waste/Vector Program provides information and education to individuals and communities on the storage and control of solid waste to minimize the threat of a health hazard, nuisance, or harborage for vermin or vectors. This program also permits and inspects solid waste collection vehicles and transfer stations. In FY2020, 2,220 "G" stickers (permits) were issued for solid waste collection vehicles.

Of the 32 septic tank manufacturers permitted in Alabama, 5 manufacturers were inspected in FY2020.

For FY2020, 900 pumper stickers were issued to septic tank pumper vehicles.

Soil Branch

The Soil Branch provides assistance to local environmentalists concerning problem soils and sites for onsite sewage disposal systems. The staff consists of three soil scientists for 66 counties.

Activities for 2020:

• Total onsite disposal sites evaluated (large flow and small flow): 877

• Septage disposal sites (land farms) evaluated: 2

• Sites with water wells identified: 10

• Training activities conducted: 33

• Number of participants trained: 205

Indoor Air Quality/Lead Branch

The Indoor Air Quality/Lead Branch provides information and printed materials on issues related to indoor air quality, molds, lead-based paint, and other lead hazards. The primary focus of the branch is to enforce the state regulations promulgated under the Alabama Lead Reduction Act of 1997. These rules

require individuals and firms engaged in lead identification and risk assessment and lead-based paint removal of pre-1978 housing and child-occupied facilities to be trained and certified to perform according to established safe work practice standards. Branch personnel also provide support for the Alabama Childhood Lead Poisoning Prevention Program. The branch is the EPA-designated state indoor air contact providing advisory services for the state and those who request it by providing indoor air quality, molds, and asbestos information and printed materials. It is also the EPA-designated agency for the Asbestos Hazard Emergency Response Act requiring local education agencies to inspect their school buildings for asbestos-containing building material, prepare asbestos

management plans, and perform asbestos response actions to prevent or reduce asbestos hazards.

Lead Contractor Certification Program activities:

- Certification of abatement firms to conduct lead-based paint activities: 54

- Certification of renovation repair and painting firms to conduct lead-based paint activities: 296

- Inspection of lead project sites: 229

- Outreach and education contractors' compliance assistance: 28

- Numbers of state lead regulations violations noted: 58

BUREAU OF FAMILY HEALTH SERVICES

Cancer Prevention and Control

Alabama Breast and Cervical Cancer Early Detection Program (ABCCEDP)

For more than 22 years, the ABCCEDP has provided free breast and cervical cancer screening and diagnostic services for women in Alabama who have no insurance and are at or below 250 percent of the poverty level. Statewide funding for the program is provided by the CDC, the state of Alabama, and the Joy to Life Foundation. In addition, the Joy to Life Foundation funds services for underserved women who are not eligible for ABCCEDP. The foundation's funding significantly enhances breast cancer screening efforts.

Breast cancer screening includes free clinical breast exams and biennial mammograms. Cervical cancer screening includes free pelvic exam, Pap smear, and an HPV test. If needed, diagnostic services such as diagnostic mammograms, ultrasounds, surgical consultations, biopsies, and colposcopies are provided. If a patient is diagnosed with breast cancer or cervical pre-invasive or invasive cancer, she is eligible to receive treatment through the Alabama Medicaid Agency. Since 2010, a total of 1,238 breast cancers and 1,966 cervical pre-invasive and invasive cancers have been diagnosed through ABCCEDP.

WISEWOMAN Program

The WISEWOMAN (Well Integrated Screening and Evaluation for Women Across the Nation) Program strives to help women who participate in ABCCEDP to understand and reduce their risk for heart disease and stroke. The program provides services to improve hypertension and promote healthy lifestyles. Each participant is screened for hypertension, hypercholesterolemia, diabetes, smoking, and body mass index. Since the program began in 2013, more than 5,000 women have participated across six counties. All participants have received health coaching, 666 participants received medication support, 1,053 participants attended at least one support group session, 203 have received nutritional sustenance, and 2,262 nutritional counseling sessions were completed by a registered dietitian. Participants are given access to resources needed to improve their cardiovascular health such as risk reduction counseling, health coaching, nutrition visits, and support groups. Program efforts have led to statistically significant improvement in hypertension through increased awareness, knowledge, and skills to improve nutrition, physical activity, and reaching and maintaining a healthy weight. Dietitian and medical follow-up visits and health coaching sessions were provided remotely during the pandemic.

The COVID-19 pandemic significantly impacted the WISEWOMAN Program, as preventative appointments in participating clinics were not available for most of 2020. During this time, the program provided a series of six COVID-19 professional development seminars. Continuing education credits were available for practitioners, nurses, social workers, and registered dietitians. Over 30,000 individuals participated in the seminars, which continue to be available via the ADPH website.

Figure 21. ABCCEDP Diagnosed Breast Cancers by Year*

Year	Count
2010	156
2011	121
2012	155
2013	129
2014	129
2015	105
2016	127
2017	111
2018	106
2019	99

*2019 is the most recent year for which statistics are available.

Figure 22. ABCCEDP Diagnosed Preinvasive and Invasive Cervical Cancers by Year*

Year	Count
2010	131
2011	61
2012	94
2013	154
2014	127
2015	153
2016	225
2017	317
2018	259
2019	445

*2019 is the most recent year for which statistics are available.

Figure 23. Alabama Cancer Incidence Rates by Site and Sex, 2009-2018 Combined[*]

Cancer Site	MALE		FEMALE	
	Rate	Count	Rate	Count
All Sites	532.5	139,186	401.2	122,705
Bladder	32.8	8,097	7.6	2,447
Brain and Other Nervous System	7.7	1,926	5.6	1,596
Breast	1.4	357	120.7	36,545
Cervix Uteri	-	-	9.0	2,301
Colon and Rectum	51.0	13,087	37.4	11,654
Esophagus	8.1	2,184	1.7	559
Hodgkin Lymphoma	2.7	645	2.0	514
Kidney and Renal Pelvis	23.5	6,155	12.5	3,856
Larynx	7.7	2,131	1.6	508
Leukemia	16.0	3,906	10.0	2,983
Liver and Intrahepatic Bile Duct	11.5	3,194	4.0	1281
Lung and Bronchus	88.5	23,157	51.6	16,783
Melanoma of the Skin	28.7	7,145	17.2	4,899
Myeloma	8.4	2,178	5.8	1,856
Non-Hodgkin Lymphoma	19.7	4,937	13.4	4,174
Oral Cavity and Pharynx	20.0	5,362	7.0	2,161
Ovary	-	-	11.4	3,463
Pancreas	14.8	3,852	11.2	3,605
Prostate	130.6	36,202	-	-
Stomach	8.8	2,242	4.9	1,542
Testis	4.4	979	-	-
Thyroid	4.9	1,230	13.5	3,579
Uterine (Corpus and Uterus, not otherwise specified)	-	-	19.5	6,163

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age groups) standard. Rates and counts are for malignant cases only with the exception of urinary bladder and groups that contain urinary bladder. *2018 is the most recent year for which statistics are available.

Alabama Statewide Cancer Registry

The Alabama Statewide Cancer Registry, a population-based cancer registry, is an information system designed for the collection, management, and analysis of cancer data. The purpose of the cancer registry is to collect accurate and up-to-date information about cancer in Alabama. The cancer data is then disseminated to public health and medical professionals, community groups, volunteer agencies, and others who are interested in cancer prevention and control. Cancer is the second leading cause of death in Alabama, exceeded only by heart disease. Approximately 1 in 3 people will be diagnosed with cancer at some point in his or her lifetime. Effective prevention measures exist to substantially reduce the number of new cancer cases each year and prevent cancer deaths. Cancer surveillance serves as the foundation for a comprehensive strategy to reduce illness and death from cancer and enables health professionals to better understand the cancer burden. The registry plays a significant role in disseminating data to aid efforts to reduce the burden of cancer in Alabama.

Alabama Comprehensive Cancer Program

The Alabama Comprehensive Cancer Program facilitates the statewide Alabama Comprehensive Cancer Control Coalition. The coalition is a statewide group of cancer-related organizations and advocates that are responsible for assessing the burden of cancer, determining priorities for cancer prevention and control, and implementing the 2016-2021 statewide comprehensive cancer control plan. The vision is to eliminate the burden of cancer in Alabama. The current 5-year goals are to expand partnerships; decrease the number of Alabamians affected by tobacco; increase the number of Alabamians receiving the HPV vaccination; reduce Alabamians' cancer risk by decreasing their exposure to ultraviolet light; strengthen survivorship, hospice, and palliative care; and increase Alabamians' access to clinical trials. Goals also include identifying and improving the health equity of disparate populations in Alabama affected by cancer. Healthy lifestyle choices such as a proper diet, regular exercise, and participation in checkups and screenings are vital. The program and coalition seek community members and organizations who are interested in setting the state's agenda for cancer control.

Colorectal and Prostate Cancer Prevention Program

The division oversees legislative funds to provide colorectal and prostate cancer screening for underserved men and women. Over the past year, the colorectal cancer funding was used to screen 60 persons. The prostate cancer funding was used to screen 169 persons. The COVID-19 pandemic significantly impacted the cancer screening program, as preventative appointments in participating clinics were not available for most of 2020. During this time, the program provided educational materials regarding the importance of cancer screening, cancer signs and symptoms, and the importance of discussing cancer screening and concerns with the individual's physician.

Child and Adolescent Health

The Child and Adolescent Health Division is comprised of the Adolescent Pregnancy Prevention Branch (APPB), Social Work Branch, Alabama Childhood Lead Poisoning Prevention Program (ACLPPP), and Healthy Child Care Alabama (HCCA) programs. The APPB Branch works to reduce the incidence of unplanned pregnancies and sexually transmitted infections among teens in Alabama. Due to the COVID-19 pandemic, program staff were reassigned to assist with the response. Staff served in multiple roles including but not limited to contact tracing, test kit distribution, development of a resource directory, patient assessment at county health departments, testing patients at county health department clinics, and staffing the informational hotline.

The branch works to reduce the incidence of unplanned pregnancies and sexually transmitted infections among teens in Alabama. The APPB utilizes federal grants awarded to the department, as well as partnerships with local and state organizations, to promote healthy decisions among young people. The branch works at the community level to provide opportunities and resources that promote the overall health and well-being of youth. This approach includes abstinence education, responsibility education, and overall positive youth development.

APPB contains the Alabama Sexual Risk Avoidance Education Program which provides abstinence education to youth in school and community settings through grants to youth-serving organizations. APPB also contains the Alabama Personal Responsibility Education Program, which provides education regarding abstinence and contraception to youth age 10-19 in community settings through grants to youth-serving organizations as well as high schools. Youth received evidence-based, medically accurate programs within several counties in the West Central, East Central, and Southwestern districts. Due to the COVID-19 pandemic, the APPB experienced multiple challenges this year. Due to lack of access to the target population, staff were reassigned to assist with the COVID-19 response.

The Social Work Unit experienced a transition in 2020 with the end of the Alabama Medicaid Patient 1st Program and the implementation of additional case management programs. Care coordination services for newborn hearing, newborn screening, and lead referrals are now provided under the new Early Periodic Screening, Diagnostic, and Treatment (EPSDT) Care Coordination Program. The unit completed 1,857 referrals in this program including 488 elevated lead referrals, 57 newborn screening referrals, and 1,312 newborn hearing referrals. On October 1, 2019, Alabama Medicaid launched the Alabama Coordinated Health Networks (ACHNs) and transferred the Plan First care coordination services from ADPH to the newly formed ACHNs. One of the ACHNs contracted with ADPH to provide care coordination services in 13 of its counties. Additionally, the unit continues to collaborate on a grant with the Department of Human Resources to ensure children enrolled in Early Head Start attend medical and dental appointments and assist in the recruitment of children with special needs into the Early Head Start Program.

Two new programs were implemented in 2020 that include care coordination services through the Social Work Unit. The Community Health Advisor Program, funded through Title X, focuses on family planning services, women's health-related conditions, and promotion of the HPV vaccine in 13 underserved counties. The ALL Babies Program through the Children's Health Insurance Program (CHIP) provides medical coverage and care coordination services to uninsured pregnant women who do not qualify for Medicaid or ALL Kids due to age, citizenship, or income in Montgomery, Macon, and Russell counties. In the first year of this program, 121 women received care coordination services.

The ACLPPP is a collaborative effort of the Bureau of Family Health Services, Bureau of Environmental Services, CDC, Association of Maternal and Child Health Programs, and Alabama Medicaid. The program provides public outreach and education to spread awareness about lead poisoning and increase the number of children screened for lead exposure. In addition, the program provides case investigation, case management services, and facilitates environmental testing to help identify and alleviate sources of lead exposure.

HCCA provides health and safety training and technical assistance to early child care providers throughout the state. In an effort to prevent injury and promote health, 14 nurse consultants work to provide first aid, safety, CPR, infection control, and poison prevention training. During FY2020, programming was provided through 3,823 classes to more than 21,400 provider staff statewide.

Perinatal Health

Maternal and Child Health (MCH)

The MCH Program coordinates federal MCH Title V Block Grant activities. MCH Title V Block Grant services to Children and Youth with Special Health Care Needs (CYSHCN) are administered through a contract with the Alabama Department of Rehabilitation Services, Children's Rehabilitation Service. The Alabama MCH Program staff continues to change the ways in which the grant is administered to better align with the objectives and goals of the federal block grant transformation. The MCH 3.0 Transformation requires states to select national measures across six population health domains. Also, states must select evidence-based or informed strategy measures (ESM) for each of the selected national performance measures. Bureau staff work with community, state, and national partners to identify and implement ESMs that improve the health of Alabama's MCH population. In addition to the ESM-focused activities, MCH Program staff also engage in other multi-partner and multi-sector projects. On September 9, 2020, the program, in collaboration with Alabama's Healthy Start grantees, hosted a virtual 2020 Infant Mortality Summit. Dynamic speakers provided attendees with tools to address disparities in health, pregnancy discrimination, reproductive justice, and provided an overview of community interventions and resources. In 2020, the MCH Program completed the 2020 Statewide Needs Assessment. More details on Alabama's newest MCH priority needs for 2021-2025 and the evidenced-informed strategies to address those needs are found in Figure 24.

MCH Epidemiology

The mission of the MCH Epidemiology Branch is to utilize research and analysis to assess needs to impact public health policy that will assure the healthiest conditions for the state's MCH populations. In order to answer a request or provide context for a statistic or topic, staff may sometimes perform literary searches and statistical testing, and identify and glean information from key subject matter experts. The branch administers the MCH Title V Block Grant Annual Report and Application, the State Systems Development Initiative Project, and the Pregnancy Risk Assessment Monitoring System (PRAMS) Project. The PRAMS Project is a joint research project between the department and CDC. On May 1, 2016, the bureau assumed administration of the PRAMS grant from the Center for Health Statistics, which began collecting PRAMS data in 1992. The purpose of this program is to determine why some babies are born healthy and others are not. To do this, a questionnaire asks new mothers about their behaviors and experiences around the time of their pregnancy. Approximately 1,400 Alabama mothers per year are randomly selected from the state birth certificate registry to receive the questionnaire for completion. Responses to the survey are used to help improve the health of mothers and babies in Alabama. The branch also provides support to the following programs within the bureau: the Alabama State Perinatal Program, which includes the Fetal and Infant Mortality Review Program and the Maternal Mortality Review Program; the Family Planning Program;

the Women's Health Medical and Social Work programs; the Childhood Lead Program; the Newborn Screening and Newborn Hearing Screening programs; and the Alabama Birth Defects Surveillance Program, which is currently under development. The branch also provides support to the State of Alabama Infant Mortality Reduction Plan Workgroup as well as the Pregnancy Outcomes Team of the department's Strategic Planning Team.

Branch members assisted and continue to assist with the COVID-19 pandemic response efforts. They have assisted in the operation of the statewide COVID-19 hotline and e-mail account; the development of the informational dashboard; and helped conduct case investigations. Throughout this time, branch members' daily responsibilities have been greatly impacted, with tasks being delayed, postponed, or assigned to other staff members when reassigned to participate on departmental response teams.

State Perinatal Program
The purpose of the State Perinatal Program is to identify and recommend strategies that will effectively decrease maternal and infant morbidity and mortality, improve maternal and

Figure 24. Alabama MCH Priority Needs, NPMs and SPMs by Domain, FY2021-FY2025

MCH Population Domain	National Performance Measures (NPMs)	Priority Needs	Evidence-Based/Informed Strategy Measures (ESMs) *Choose at least one per NPM*
Women/ Maternal Health	**NPM # l: Well-Woman Visit** (Percent of women, age 18 through 44, with a preventive medical visit in the past year) **NPM # 13.1: Preventive Dental Visit** (Percent of women who had a preventive dental visit during pregnancy)	• High levels of maternal mortality • Lack of preventive dental visits across all Title V populations, especially for those uninsured	• **ESM 1.1:** Proportion of women age 15-55 who report receiving a preventive medical visit in the past 12 months by increasing total enrollment percentage in the Well Woman Program by 2 points annually • **ESM 13.1.1:** Proportion of at-risk pregnant women who report receiving a preventive dental visit during pregnancy by piloting the First Steps Program • **ESM 13.1.2:** Proportion of at-risk pregnant women who are educated about the importance of receiving preventive dental care during pregnancy and assist with linking Medicaid insured to needed dental services by piloting the First Steps Program
Perinatal/ Infant Health	**NPM #3: Risk-Appropriate Perinatal Care** (Percent of very low birth weight [VLBW] infants born in a hospital with a Level III+ Neonatal Intensive Care Unit [NICU]) **NPM # 5: Safe Sleep** (A. Percent of infants placed to sleep on their backs B. Percent of infants placed to sleep on a separate approved sleep surface C. Percent of infants placed to sleep without soft objects or loose bedding)	• High levels of infant mortality (and associated factors of preterm birth and low birth weight) • High levels and worsening trends of sleep-related/SUID deaths	• **ESM 3.1:** Percent of delivering hospitals convened at a meeting to share data and discuss the Alabama Perinatal Regionalization System Guidelines • **ESM 3.2:** Number of steps of the CDC's Level of Care Assessment Tool (LOCATe) Process completed in order to design and align the Alabama Perinatal Regionalization System Guidelines with the national criteria for the Maternal Levels of Care • **ESM 5.1:** Percent of WIC prenatal participants placing their infants to sleep on their backs • **ESM 5.2:** Number of sleep-related infant deaths • **ESM 5.3:** Number of trainings facilitated to assist healthcare professionals and first responders, who interact with expecting and new mothers, with being trained on safe sleep recommendations
Child Health	**NPM #6: Developmental Screening** (Percent of children, age 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year) **NPM # 13.2: Preventive Dental Visit** (Percent of children, ages 1 through 17, who had a preventive dental visit in the past year) **SPM #1:** Percent of children who receive a blood lead screening test at age 12 and 24 months of age	• Lack of timely, appropriate, and consistent health and developmental screenings • Lack of preventive dental visits across all Title V populations, especially for those uninsured • Lack of timely, appropriate, and consistent health and developmental screenings	• **ESM 6.1:** Proportion of children birth to age 19 that received a well-child appointment in the past year • **ESM 6.2:** Proportion of children birth to age 19 that received a developmental screening in conjunction with a well-child appointment in the past year • **ESM 6.3:** Proportion of children aged 12 and 24 months that have a reported blood lead screening in the past • **ESM 13.2.1:** Proportion of infants and children, ages 1 through 17 years, who report receiving a preventive dental visit in the past 12 months by piloting the Home by One Program • **N/A**
Adolescent Health	**NPM # 10: Adolescent Well-Visit** (Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year) **NPM # 13.2: Preventive Dental Visit** (A. Percent of children, ages 1 through 17, who had a preventive dental visit in the past year) **SPM #4:** Percent of women who smoke during pregnancy	• Lack of timely, appropriate, and consistent health and developmental screenings • Lack of preventive dental visits across all Title V populations, especially for those uninsured • Lack of support for pregnant and parenting teens	• **ESM 10.1:** Proportion of adolescents aged 12 to 19 that received an adolescent well visit in the past year • **ESM 13.2.1:** Proportion of infants and children, ages 1 through 17 years, who report receiving a preventive dental visit in the past 12 months by piloting the Home by One Program • **N/A**

| Children with Special Health Care Needs (CSHCN) | **NPM # 12: Transition** (Percent of adolescents with and without special healthcare needs, ages 12 through 17, who received services necessary to make transitions to adult health care)

SPM #2: Strengthen and enhance family/youth partnerships, involvement and engagement in advisory groups, program development, policymaking, and system-building activities to support shared decision making between families and health-related professionals

SPM #3: Increase the capacity of families to connect CYSHCN to the health and human services they require for optimal behavioral, developmental, health, and wellness outcomes through the Care Coordination Program | • Lack of or inadequate access to services necessary for CSHCN to transition to all aspects of adult life

• Increase family and youth involvement and participation in advisory groups, program development, policy-making, and system building activities

• Lack of or inadequate access to health and related services, especially in rural areas and for services identified as difficult to obtain | • **ESM 12.1:** Percent of YSHCN enrolled in the State CSHCN Program with a transition plan in place

• **ESM 12.2:** Percent of YSHCN enrolled in State CSHCN program who report satisfaction with their transition experience to adulthood

• N/A

• N/A |
| Cross-Cutting/ Systems Building | **SPM #5:** Percent of women, ages 18-44, with follow-up colposcopy visit when indicated, in the past year

SPM #6: Increase the proportion of Early Head Start (EHS) programs participating in the Early Head Start Child Care Partnership grant program that maintain 10% of their population with children with special needs

SPM #7: Percent of staff trained at day care provider/centers on CPR/First Aid

SPM #8: Number of modules of the University of Wisconsin-Madison's Population Health Initiative's Health Equity Training Modules completed in order to advance health equity in the Alabama MCH Title V Block Grant Program | • Lack of or inadequate or inequitable access to opportunities to make choices that allow people to live a long, healthy life where they live, learn, work, and play

• Lack of or inadequate or inequitable access to opportunities to make choices that allow people to live a long, healthy life where they live, learn, work, and play

• Lack of or inadequate or inequitable access to opportunities to make choices that allow people to live a long, healthy life where they live, learn, work, and play

• Lack of or inadequate or inequitable access to opportunities to make choices that allow people to live a long, healthy life where they live, learn, work, and play | • N/A

• N/A

• N/A

• N/A |

infant health through a system of regionalized care, and provide leadership in establishing program priorities. Program activities include maternal, fetal, and infant mortality reviews; education to reduce risk factors associated with Sudden Unexpected Infant Death (SUID); promotion and education about the Alabama Perinatal Regionalization System Guidelines; support and promotion of breastfeeding; participation in local, state, and national committees to reduce maternal and infant mortality; provision of outreach education to healthcare providers and the public; and continuing the initiatives of the State of Alabama Infant Mortality Reduction Plan.

In 2020, the program participated in ADPH's response to the COVID-19 pandemic. Program staff members volunteered to assist in the operation of the statewide COVID-19 hotline and e-mail account and conducted contact tracing and death investigations. During this time, staff members continued daily responsibilities and continued to hold case review team meetings, community action team activities, and maternal mortality review committee meetings.

Alabama released its first Maternal Mortality Review Report in fall 2020. The report outlines imperative findings, which include causes of death, contributing and key factors, and recommendations for preventive strategies for the 2016 maternal deaths reviewed by the committee.

Newborn Screening Program
The Alabama Newborn Screening Program is a comprehensive and coordinated system encompassing education, screening, follow-up, diagnosis, evaluation, and management of certain genetic disorders. In 2020, Alabama screened for 31 recommended disorders including the bloodspot screening, newborn hearing screening, and pulse oximetry screening to detect critical congenital heart disease. The Alabama BCL provides blood analysis of newborn screening specimens, and manages a web-based system, Secure Remote Viewer, which allows medical providers to access newborn screening results online.

There were significant challenges in 2020 for the program. In September 2020, the Alabama Newborn Screening Program relocated from Montgomery to the new state health laboratory in Prattville. Additionally, the emergency response to the COVID-19 pandemic impacted program functioning. Some follow-up staff volunteered to assist with emergency response activities to include contact tracing. The pandemic also affected timely follow-up services received by families such as outpatient diagnostic hearing evaluations.

Newborn screening allows treatment to be initiated within the first few weeks of life, preventing some of the complications associated with disorders. Early diagnosis may

reduce morbidity, death, intellectual disability, and other developmental disabilities. The program works in partnership with pediatric subspecialists throughout the state to ensure all babies identified with presumptive positive results receive appropriate follow-up. The program's subspecialists participate in provider education webinars and on the Alabama Newborn Screening Advisory Committee. Additionally, six community-based sickle cell organizations provide counseling services and follow-up for children identified with sickle cell disease or trait.

The Alabama Early Hearing Detection and Intervention (EHDI) Program, Alabama's Listening, ensures that all infants receive a hearing screening prior to hospital discharge, and that they are referred for further testing and intervention if they do not pass the screening. The Alabama's Listening Program is federally funded. The goal of the program is to follow the Joint Committee on Infant Hearing Guidelines, which is screening by 1 month of age, diagnostic hearing evaluation by 3 months of age, and referral to early intervention by 6 months of age to

Figure 25. Newborn Screening Primary Disorder Confirmed, 2020

2020 NBS Core Disorders	Number of Lab Referrals, Initial Failed Hearing Results, and Failed Pulse Oximetry Results Reported to the Follow-up Program	Number of Confirmed Diagnoses	Number Referred for Intervention/ Specialty Care
3-Hydroxy-3-methyglutaric aciduria	0	0	0
3MCC	8	1	1
Argininosuccinic Aciduria	0	0	0
Beta Ketothiolase Deficiency	0	0	0
Biotinidase Deficiency	1	1	1
Carnitine Uptake Defect (CUD)	43	1	1
Citrullinemia Type 1	27	0	0
Classic Galactosemia	29	2	2
Classical Phenylketonuria (PKU)	22	2	2
Congenital Adrenal Hyperplasia	22	2	2
Congenital Hypothyroidism	86	40	40
Critical Congenital Heart Disease	8	1	1
Cystic Fibrosis	201	15	15
Glutaric Acidemia Type 1	2	0	0
Hearing Loss	1,868	53	53
Holocarboxylase Synthase Deficiency	0	0	0
Homocystinuria	53	0	0
Isovaleric Acidemia	2	0	0
LCHAD (Long-chain)	1	0	0
Maple Syrup Urine Disease	13	0	0
MCADD (Medium-chain)	14	2	2
Methylmalonic Acidemia (Cbl A, B)* Methylmalonic Acidemia Mutase* Propionic Acidemia*	34	2	2
SCID (Testing began 10/1/2018)	48	0	0
S Beta Thalassemia	3	3	3
SC Disease	12	12	12
SS Disease	34	34	34
Trifunctional Protein Deficiency	0	0	0
Tyrosinemia Type I	88	0	0
VLCAD (Very Long Chain)	4	1	1
Totals	**2,623**	**172**	**172**

*Same analyte used to test.

ensure optimal language acquisition, academic achievement, and social and emotional development.

During 2020, the Alabama Newborn Screening Program received approximately 2,623 lab referrals and identified 172 infants with a newborn screening condition.

Oral Health Office (OHO)

A rewarding and challenging year for the OHO began with the publication of Alabama's first State Oral Health Plan, *"Your Mouth/Your Health, The Connection of Oral Health to Overall Health."* The plan was engineered as a dynamic document designed to convey the vision for the oral and overall health and well-being of the citizens of the state of Alabama. The plan is the benchmark by which future progress will be measured employing S.M.A.R.T. (Specific, Measurable, Achievable, Realistic, Timed) objectives to be modified accordingly in 5-year intervals.

Consistent community water fluoridation efforts in the state increased as recognized by a 21 percent increase in the number of CDC-awarded fluoridation awards. These awards are earned by water plants that uniformly maintain an optimal fluoride level of 0.7 ppm for the preceding 12-month reporting period. A total of 109 wells and treatment plants were awarded for the year 2019 as compared to 86 during the previous year. In early 2020, the OHO revamped the collection method of split water samples that are submitted monthly by water plants to the state laboratory which allows for proper calibration of the equipment. This change, which allows more direct communication, simplifies and increases efficiency of the tests to monitor and ensure proper levels of fluoride in the community water supplies with increased quality control measures.

The importance of preventive dental visits for children and expectant mothers and new guidelines and FDA approval of the HPV vaccine for oropharyngeal cancer were stressed during presentations to a variety of organizations: USA/OB GYN Conference; ADPH Cancer Leadership; Montgomery District Dietetic Association; Alabama Medicaid Association; third-year dental students at University of Alabama School of Dentistry; and State Department of Education Physical Education Department.

The third annual "Share Your Smile with Alabama" campaign featuring two third graders, held during National Children's Dental Health Month, promoted the importance of preventive dental visits for children and community water fluoridation (CWF). The campaign for 2020 also emphasized the 75th Anniversary of CWF. The winners were announced during a statewide news broadcast, featured in theater ads throughout the state, and promoted on billboards adjacent to the winners' respective schools.

The planning and implementation of a basic screening survey of kindergarten and third grade students in 50 schools throughout the state, selected randomly by the Association of State and Territorial Dental Directors (ASTDD), launched in 2020. The survey is a needs assessment that stratifies information obtained regarding incidence of treated/untreated decay and presence of sealants over a wide range of categories such as age, race/ethnicity, gender, and participation in free/reduced lunch programs. Height and weight are also collected to assess body mass index of the sample selection. The survey is recommended at 5- to 7-year intervals to identify disparities throughout the state's child population.

The ASTDD recognized a partnership between the OHO and HandsOn River Region, the organization which oversees the Pay It Forward (PIF) program, as a Best Practice. PIF employs a value-based system in which participants complete volunteer hours in exchange for dental treatment from volunteer dentists. Over 200 organizations are enrolled in the program which was originally intended for expectant mothers with no insurance, but has expanded to include expectant fathers and chronically unemployed or difficult-to-place individuals.

Collaboration between the OHO and USA Mitchell Cancer Institute continued with the "WATCH YOUR MOUTH" campaign designed to promote education about the FDA-approved vaccine for prevention of HPV-related oropharyngeal and other oral cancers.

COVID-19 brought about unique challenges for the dental community due to the mode of transmission of the virus via aerosols. The closure of dental offices abruptly disrupted many of the anticipated interactions with the OHO. As a result, the staff of the OHO transitioned to duties associated with the pandemic while simultaneously maintaining program integrity. Staff answered COVID-19 related e-mails, assembled and delivered test kits, delivered remdesivir to hospitals, and were assigned to the contact tracing and investigations teams. Much-needed personal protective equipment was delivered to dental offices statewide, and funds originally intended for promotional campaigns were redirected to other areas of need.

Women's Health

The overarching goals of the Women's Health Family Planning Program include decreasing unintended pregnancies and assisting clients to plan and space the time between pregnancies. In FY2020, the program provided education and counseling, medical examinations, laboratory tests, and contraceptive supplies for approximately 90,000 visits of 40,800 individuals of reproductive age in 64 of Alabama's 67 counties. (Services were provided in Jefferson and Mobile counties via contract.)

During FY2020, the Family Planning Program continued efforts to expand access to ADPH's broad range of family planning services. The program received supplemental Title X funding to launch a 13-county community health advisor initiative in collaboration with UAB's O'Neal Cancer Center. Goals of the initiative are to increase public awareness of the importance and availability of cervical cancer screening and HPV vaccine in the county health departments. For this initiative, UAB recruited community workers – individuals whose standing and influence in the communities enable them to act as "cultural brokers" – to carry out targeted outreach activities. The workers also promote awareness of ADPH's comprehensive family planning services.

Although the onset of COVID-19 limited access to county health department services, the program's quick response assured patient access to essential, time-sensitive family planning and related healthcare. The program implemented a telephone visit model, assuring that most ADPH patients could continue

their family planning methods uninterrupted, despite COVID-19 restrictions. Nurse practitioners conduct telephone visits, which facilitate continuation of family planning services, even if COVID-related duties require reassignment of clinic nurses. During FY2020, the program also continued training nurse practitioners on intrauterine device insertion methods and provided critical colposcopy services.

Office of Women's Health (OWH)
The OWH provides statewide leadership and coordination to promote the health of women and girls through policy, advocacy, education, and partnership. The office achieves its mission and vision by educating health professionals, and motivating behavior change in consumers through the dissemination of health information. Two major initiatives in 2020 included continued outreach for the prevention and increased awareness of Neonatal Abstinence Syndrome (NAS) by hosting/coordinating the Alabama Opioid Misuse in Women/NAS Taskforce meetings, and the expansion of the department's Well Woman Program into an additional county. The Well Woman Program is now offered in seven Alabama counties: Butler, Dallas, Wilcox, Macon, Montgomery, Russell, and Marengo, with plans underway to expand into other counties in 2021.

The Well Woman Program is one of several strategies of the Governor's Initiative to Reduce Infant Mortality in Alabama. Its main focus is to improve the overall health of women of childbearing age before and after pregnancies, thereby ensuring more favorable obstetrical outcomes thereafter. The program allows for women to receive a preventative wellness screening, opportunity to participate in behavioral change programs addressing chronic diseases, food choices, physical activity, and referrals for smoking cessation. The program continues to see an increase in participant enrollment.

Women, Infants, and Children Program
The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) serves women who are pregnant, recently had a baby, or are breastfeeding; infants; and children up to the age of 5 years. To qualify to receive WIC benefits, the applicant must meet income guidelines, and have at least one nutrition risk documented. Benefits provided by the WIC Program include quality nutrition education and services, breastfeeding promotion and support, referrals to maternal and child healthcare services and other assistance agencies, and supplemental foods prescribed as a monthly food package. Supplemental foods include fresh fruits and vegetables, whole grains, dairy, protein sources, juice, infant foods and formula, as well as other specialized formulas ordered by physicians.

Alabama WIC is in its second year of electronic benefits issuance which provides a better shopping experience for WIC families. Transitioning to an electronic food benefits system also supports social distancing during COVID-19, enabling benefits to be issued remotely under a federally approved remote benefits issuance waiver. Other COVID-19 waivers implemented to ensure participant safety and continuation of services during the pandemic include a physical presence

waiver and a separation of duties waiver, both promoting social distancing. For certain participant groups, benefits are automatically issued each month without action from the participant. Participants in need of regular nutritional assessments are able to receive benefits via a telephone appointment. In addition to social distancing waivers, Alabama's WIC Program implemented a food package substitution waiver to ensure adequate supplies of whole wheat/whole grain bread remained available to participants during the early stages of the pandemic. These waivers have ensured the successful continuation of WIC services to over 116,000 average monthly participants during 2020.

Figure 26. WIC Redemptions by District, FY2020

Districts	FY2020 Total Redemptions
East Central	$12,959,983.20
Jefferson	$9,212,241.37
Mobile	$8,782,066.24
Northern	$16,811,578.50
Northeastern	$12,040,226.20
Southeastern	$8,475,042.80
Southwestern	$7,547,179.04
West Central	$7,679,646.18
Total	**$83,507,963.53**

Figure 27. Average Participation for WIC, 2020

Average Women 26,935 (23%)

Average Children 57,493 (50%)

Average Infants 31,628 (27%)
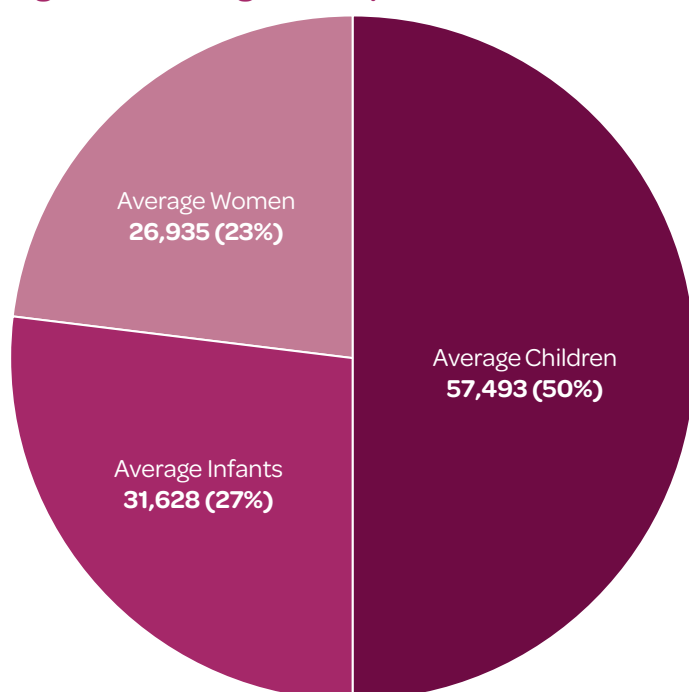
OFFICE OF FIELD OPERATIONS

Field Operations was heavily involved with COVID-19 response in 2020, staffing more than 2,600 testing clinics and later in the year with vaccination clinics.

Clinical Management and Practice

Clerical
Public Health clerical staff provide professional assistance in the daily operations of county health departments and in the daily functions of the districts and central office. Staff serve in a variety of roles including front desk receptionist, intake clerk, home health clerk, and office manager. Each administrative support staff member is vital to the agency's ability to meet the needs of the citizens of Alabama.

Electronic Health Record
The Electronic Heath Record (EHR) Division is continuing to implement enhancements to improve patient care at county health departments. In the past year, the division has successfully interfaced all county health department locations with the ImmPRINT immunization registry, established an automated clinical diagnosis interface with the Alabama NEDSS Based Surveillance System, and is successfully transmitting and receiving data from Alabama's One Health Record. Self-check-in kiosks are being installed at all county health department locations to assist with the check-in procedures for patients. The kiosks allow patients to update critical information and documents related to their care while remaining socially distant from clerical staff. In response to COVID-19, the EHR staff mailed quarantine letters, assisted with the information hotline, and completed contact tracing and investigations.

Nursing
The mission of Public Health Nursing is to assure conditions in which individuals, families, and communities can be healthy utilizing the unique expertise of Public Health nurses to assess, plan, and implement programs which promote health and prevent disease. The department employs 751 nurses who provide family planning, child health, and preventive and treatment services for disease control. Public Health nurses are active in the community through involvement in health fairs and other educational opportunities. The department is an approved provider of continuing education by the Alabama State Nurses Association. In 2020, over 2,500 participants earned 70 continuing education units through 32 programs that were offered.

Social Work
Social work staff serve as members of a multi-disciplinary team of professionals, skilled in using social work values, knowledge, and community resources to promote positive health outcomes, while respecting personal choice and promoting the health and well-being of individuals, groups, and communities. Public Health social workers act as liaisons within their respective communities, educating and advocating for changes to improve poor outcomes related to social determinants of health. Public Health Social Work is an approved provider of Social Work Continuing Education by the Alabama Board of Social Work

Examiners, and during 2020 provided social work continuing education credit for more than 60 programs both onsite and via satellite. The department employs approximately 120 social workers who provide care in county health department clinics, patient homes, and the local community. They are responsible for programmatic oversight in the county, district, and central office. Social workers provide direct service to a multitude of Alabamians in a variety of settings and programs within the department including Adolescent Abstinence Education, Alabama Personal Responsibility Education Program, CHIP, Diabetes Self-Education, Elevated Lead, HIV Care Coordination, Home Health, Licensure and Certification, Maternity Care Coordination, Metabolic Care Coordination, Newborn Hearing Screening, Prenatal Education, STD, Suicide Prevention, Telehealth, TB, Well Woman, and WISEWOMAN, and serve on several committees at the local level using the Collective Impact framework to address deeply entrenched and complex social problems that negatively impact the communities of Alabama.

Community Affairs
The department established the Office of Community Affairs in 2015 to address healthcare transformation and its impact on communities, programs, and resources. Better health for populations, better quality care for individuals, and lower per capita costs was the framework developed for healthcare transformation.

The office works to identify ways the department can partner with other community entities to ensure poor social determinants of health and risky health behaviors are addressed by connecting programs, populations, and resources. The office focuses on working across multiple organizations and through stakeholders to address the complex health concerns of Alabama citizens. These include enhancing appropriate access to care through strengthening transportation policy and supporting telehealth, especially for residents of rural areas.

Telehealth
Telehealth is a statewide program with 65 county health departments equipped with telehealth carts. Collaborating with 15 healthcare agencies, ADPH staff facilitate services such as nephrology, neurology, cardiology, behavioral health, genetic counseling, maternal-fetal medicine, HIV, and diabetes education. The Telehealth equipment is also utilized by ADPH staff for meetings and training events.

The Telehealth office manages several grants that provide for the deployment of carts, specialty equipment, and funding for county health department staff, primarily nurses and social workers, who are trained as "telepresenters" to operate the equipment during the telehealth appointments. ADPH continues to improve and increase the usage opportunities of the telehealth carts by expanding the network of partners and with new equipment upgrades as funding becomes available.

In response to the COVID-19 pandemic, Telehealth program staff mailed quarantine letters, conducted contact tracing, and delivered supplies to county health departments.

BUREAU OF FINANCIAL SERVICES

The Bureau of Financial Services provides support to the department through financial and cost accounting management. Services rendered in support of the department and its goals include accounts receivable, payroll, accounts payable, purchasing, budgeting, grant accounting, production planning, and administrative support.

In FY2020, Financial Services managed the department's $793 million budget using 314 internal budgets interfaced with 12 Executive Budget Office spending plan activities, and 293 internal funds interfaced with 13 State Comptroller's funds in the State Treasury. The bureau managed a total of more than 100 federal grants with a value in excess of $490 million and 361 contracts totaling over $707 million.
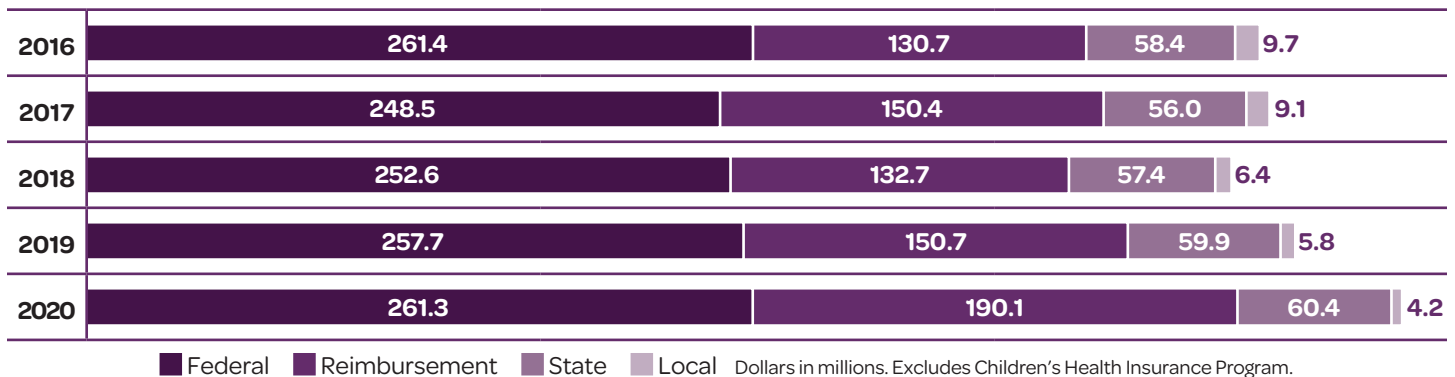
Included in the federal grants are WIC gross food outlays of $84.3 million including $32.1 million received from the department's infant formula rebate contract. The bureau

provided fiscal agent services in the form of payroll, procurement, accounts payable, contract payment processing, and budget management to the Family Practice Rural Health Board and the Board of Medical Scholarship Awards.

As a result of the COVID-19 pandemic, the bureau was responsible for increased grant funding provided to the department for use in responding to the pandemic. In addition, the bureau coordinated the department's reimbursement requests from the Governor's CARES Act monies. In FY2020, total reimbursements from CARES monies totaled over $36.6 million for COVID-related expenses to include contact tracing, contract services, clinical laboratory supplies, COVID reagents and test kits, information technology infrastructure, personal protective equipment, remote work, and personnel costs.

Additionally, the bureau provides all accounting services for the Alabama Public Health Care Authority (the authority). The

Figure 28. Public Health Funding History (Fiscal Year)

Year	Federal	Reimbursement	State	Local
2016	261.4	130.7	58.4	9.7
2017	248.5	150.4	56.0	9.1
2018	252.6	132.7	57.4	6.4
2019	257.7	150.7	59.9	5.8
2020	261.3	190.1	60.4	4.2

■ Federal ■ Reimbursement ■ State ■ Local   Dollars in millions. Excludes Children's Health Insurance Program.

Figure 29. State Appropriations – Public Health (Fiscal Year)

Year	General Fund	Education Trust Fund
2015	33.7	13.8
2016	36.9	14.5
2017	32.3	16.6
2018	32.5	16.7
2019	35.5	16.9
2020	36.4	16.6
2021	48.7	18.2

■ General Fund ■ Education Trust Fund   Dollars in millions.
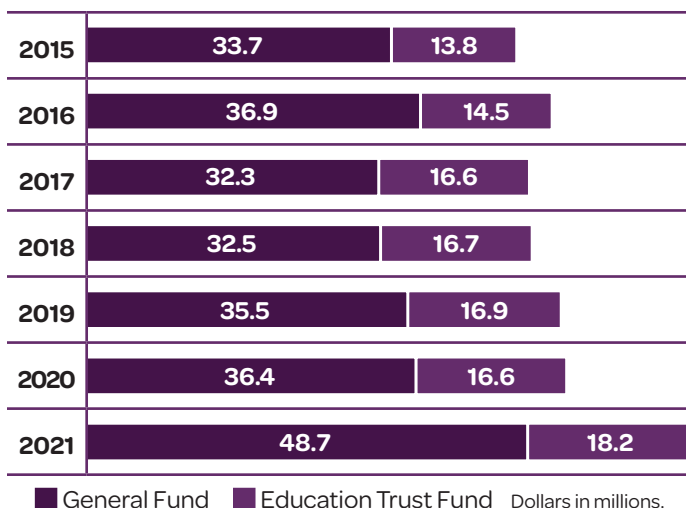
Figure 30. State Appropriations - CHIP (Fiscal Year)

Year	General Fund
2015	47.6
2016	
2017	
2018	
2019	
2020	35
2021	60.7

■ General Fund   Dollars in millions.
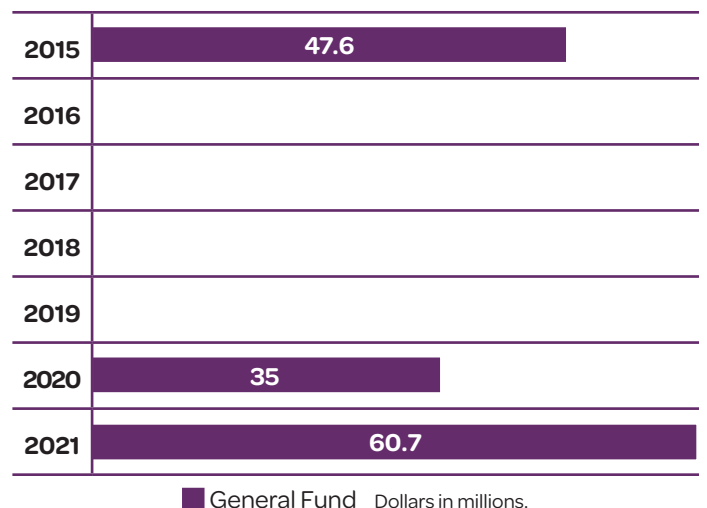
Figure 31. Governor's CARES Act Monies FY2020 Reimbursement

Supplies, Materials, and Operating	$15,010,451
Personnel Costs	$13,408,432
Employee Benefits	$5,095,735
Other Equipment Purchases	$2,058,860
Professional Services	$609,560
Grants and Benefits	$282,724
Transportation Equip Purchase	$90,329
Repairs and Maintenance	$33,276
Rentals and Leases	$27,763
Travel In-State	$9,425
Utilities and Communications	$4,984
Transportation Equip Operation	$2,281
Total	**$36,600,000**

State Committee of Public Health authorized the department to establish the authority as a public corporation in 1995. The mission of the authority is to build, furnish, and equip public health facilities throughout Alabama.

The authority has completed the Phase I, II, and III building programs, which included constructing and renovating 64 facilities, and continues to propose and develop solutions for additional public health buildings and equipment needs.

During FY2020, a Phase IV building program received substantial completion for a new state laboratory with adjacent training center, which includes office space.

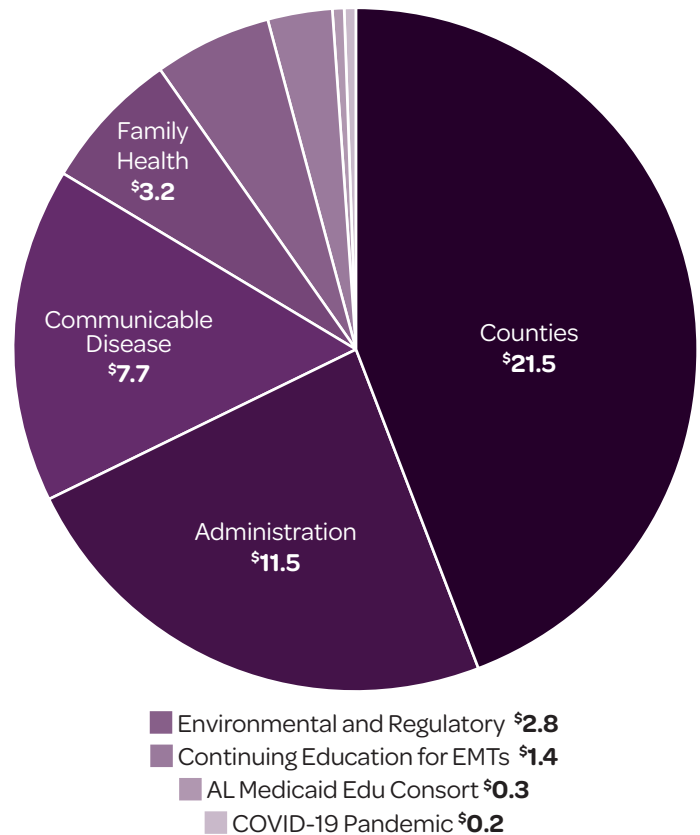The authority manages the Alabama Public Health Capital Maintenance Trust Program, which provides funding for a comprehensive, coordinated preventative maintenance improvement and replacement program for public health facilities in Alabama. The authority's construction management

Figure 32. Use of State Funds – FY2020

General Fund and Education Trust Fund Only (In Millions)
Expenditures by Comptroller's Object Code Category

Family Health $3.2
Communicable Disease $7.7
Counties $21.5
Administration $11.5

- Environmental and Regulatory $2.8
- Continuing Education for EMTs $1.4
- AL Medicaid Edu Consort $0.3
- COVID-19 Pandemic $0.2

firm provides technical assistance, advice, and program monitoring. The program spent $971,096 during FY2020 to provide the following services:

- Periodic facility inspections to identify deficiencies, repairs, and maintenance needs.

- Maintenance contracts for heating, ventilation, air conditioning systems, fire alarms, and fire sprinkler systems.

- Roof systems maintenance/repair and a full range of other maintenance repair expenditures and renovations to maintain public health facilities in good working order.

BUREAU OF HEALTH PROVIDER STANDARDS

MISSION STATEMENT

The mission of the Bureau of Health Provider Standards is to improve quality of care and quality of life for healthcare consumers and to reduce adverse outcomes through the process of licensure inspection and certification of healthcare providers.

The bureau consists of several units that include, but are not limited to Assisted Living, Medicare Other, Long Term Care, and Clinical Laboratory Improvement Amendment (CLIA). Each unit serves only in its specialty and performs license inspections, unannounced surveys for complaints and compliance, and certification surveys when required. The bureau processes applications for initial licensure, certification, change of ownership, annual license renewal, and changes in provider information.

Medicare Other

The Medicare Other Unit was not able to complete all of the FY2020 Centers for Medicare and Medicaid Services (CMS) workload due to COVID-19. On March 16, normal survey activity was put on hold and has not resumed. The unit has been able to conduct initial licensure, initial certification, and immediate jeopardy/complaint surveys. A total of 10 hospital complaint investigations, 5 initial certification surveys for rural health clinics, 2 hospice complaints, and 2 end stage renal disease initial licensure surveys were conducted.

Long Term Care

The Long Term Care Unit completed 97 of the 229 required CMS standard surveys and investigated 107 complaints during FY2020. The statewide average interval requirement between consecutive standard health surveys must be 12.9 months or less. The statewide average was 12.4. In March 2020, due to the COVID-19 pandemic, CMS surveys were suspended with a requirement to begin conducting infection control surveys of long-term care facilities. The Long Term Care Unit has conducted at least one infection control survey of all its 227 providers with some requiring additional visits to review infection control processes and mitigation. Since March, the unit conducted 411 infection control surveys. The unit hired five Licensure and Certification Surveyors in FY2020. All are in the process of training and will be required to pass the Surveyor Minimum Qualifications Test to conduct federal surveys of nursing homes.

Assisted Living Facilities (ALFs)

In March 2020, the ALF Unit suspended licensure surveys due to the COVID-19 pandemic. Prior to the pandemic, the ALF Unit completed 58 ALF surveys and 35 Specialty Care Assisted Living Facility (SCALF) surveys. Additionally, the ALF Unit completed 4 unlicensed surveys for a total of 97 surveys. Sixty-three complaints were investigated. Currently, the ALF Unit is conducting infection control surveys and continues to investigate complaints. Two facilities had probational licenses, and there were 193 licensed ALFs and 103 licensed SCALFs.

CLIA Laboratory

Any laboratory performing clinical laboratory tests for the purpose of diagnosis, treatment, or prevention is required to be CLIA certified. CLIA serves to assess how clinical laboratories monitor their pre-analytic, analytic, and post-analytic systems to ensure the quality of testing provided for the patients/clients. Although CLIA's main objective is to determine a laboratory's compliance with the regulations, CLIA seeks to aid the laboratories in improving patient care by promoting an educational survey process. In addition to operating with one fewer surveyor, the survey process was suspended in March until September 1, due to the public health emergency. The COVID-19 crisis created additional responsibilities for the CLIA Unit, as numerous laboratories implemented COVID-19 testing. Some CLIA staff also provided assistance on special response teams to ensure the public stayed aware of safety precautions, testing sites, and other general information related to the crisis. Exclusive of the emergency response, CLIA successfully completed 109 recertification and initial surveys for FY2020, and finished the year at 41.44 percent completion of usual survey processes. The CMS Regional Office technical consultant conducted federal monitoring surveys for each of the surveyors on staff and found no deficits in the surveyors' performance. Not only is CLIA responsible for laboratories with CLIA certification, but also clinical laboratories in Alabama which are licensed and seeking licenses as independent clinical and independent physiological laboratories.

Provider Services License and Certification

Certification: There are 1,260 certified facilities and agencies in Alabama. Provider categories with the most significant change were rural health clinics (9 percent increase), rehabilitation centers (9 percent increase), and federally qualified health centers (9.25 percent increase).

Figure 33. Summary of Licenses and Investigations

Facility Type	Total Complaints Investigated	Facilities with Probational Licenses
Abortion Centers	0	0
ALFs/SCALFs	63	2
Ambulatory Surgical Centers	1	0
End Stage Renal Disease Treatment Centers	1	0
Home Health Agencies	1	0
Hospitals	15	0
Hospice Agencies	5	0
Nursing Homes	107	0

Licensure: The Provider Services License Unit has continued to process applications for initial facility licensure and license amendments. There were 166 licenses processed for FY2020.

Figure 34. Licensed Health Care Facilities and Agencies

Abortion or Reproductive Health Centers	5
Ambulatory Surgical Centers	47
ALFs	193
SCALFs	103
Cerebral Palsy Centers	1
End Stage Renal Disease Treatment Centers	184
Freestanding Emergency Departments	5
Hospice Agencies	182
Hospitals	117
Independent Clinical Laboratories	418
Independent Physiological Laboratories	67
Nursing Homes	232
Rehabilitation Centers	31
Sleep Disorder Centers	17
Total	**1,602**

CENTER FOR HEALTH STATISTICS

The Center for Health Statistics operates the vital records system and collects and tabulates health-related statistical data for the state of Alabama. The center files, stores, and issues certified copies of vital records including birth, death, marriage, and divorce certificates for events that occur in Alabama. In addition to registering vital records and issuing certified copies, the center corrects and amends birth and death records and creates new certificates after legal actions. The center consists of the following divisions: Administrative Services, Quality Assurance and Registration, Record Services, Special Services, and Statistical Analysis.

An automated vital records system called ViSION, or Vital Statistics Image Oriented Network, allows vital records to be issued in all Alabama county health departments. Customers can obtain vital records from the center through county health departments, usually within 15 minutes or less. Customers may also order records over the Internet, by telephone for next business day delivery, or by regular mail.

More than 166,900 vital records were registered with the center in 2020. All birth records are registered electronically, and approximately 95 percent of divorce and 96 percent of death certificates are regi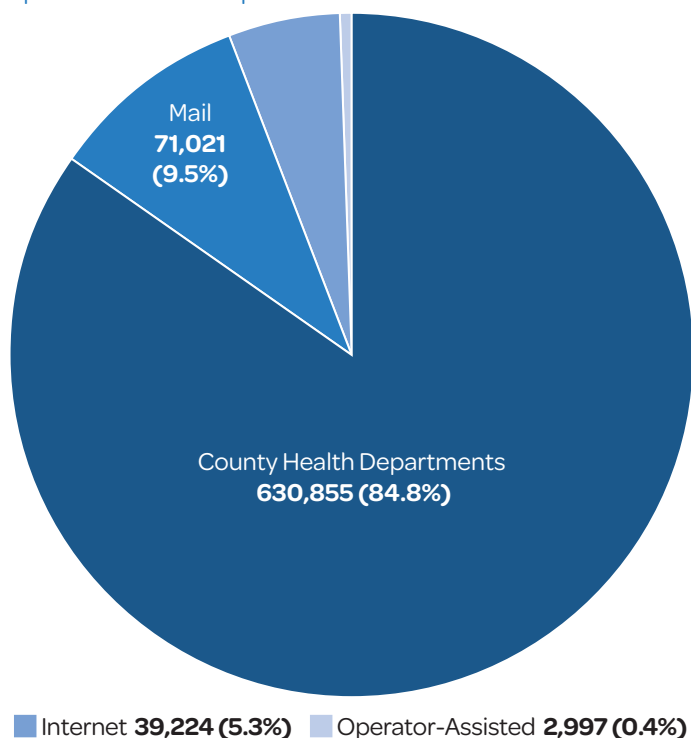stered electronically. The center continues to increase the number of death records registered through the Electronic Death Registration System (EDRS), which allows families to obtain certified copies more quickly.

A significant addition to the EDRS, the supplemental medical certification, allows medical certifiers to electronically make changes, corrections, or additions to the cause of death information on a death certificate. More than 1,475 supplemental medical certifications were completed electronically in 2020. Other changes to vital records are made in the center by the Special Services Division, which created approximately 4,800 new birth certificates following adoption or parentage determination and amended approximately 3,000 birth certificates and 1,200 death certificates.

The center's Statistical Analysis Division conducts studies and provides analyses of natality, pregnancy, general mortality, infant mortality, causes of death, marriage, divorce, and other demographic and health-related data for public health policy and surveillance. Results are distributed through numerous publications, reports, presentations, special tabulations, and the department's website to the public, news media, researchers, government or private agencies, and various units within the department.

Figure 35. Certified Copies of Vital Records Issued, 2020

The center issued 744,097 certified copies of vital records through county health departments, mail, Internet, and operator-assisted requests.

Mail
71,021
(9.5%)

County Health Departments
630,855 (84.8%)

Internet **39,224 (5.3%)**   Operator-Assisted **2,997 (0.4%)**

Figure 36. Death Certificate Registration, 2020

Month	Electronic	Paper
Dec	6,138	181
Nov	4,883	156
Oct	4,840	200
Sept	5,205	184
Aug	5,471	223
July	5,328	194
June	4,919	232
May	4,473	199
Apr	4,764	184
Mar	4,634	263
Feb	4,074	201
Jan	5,015	266

Electronic   Paper
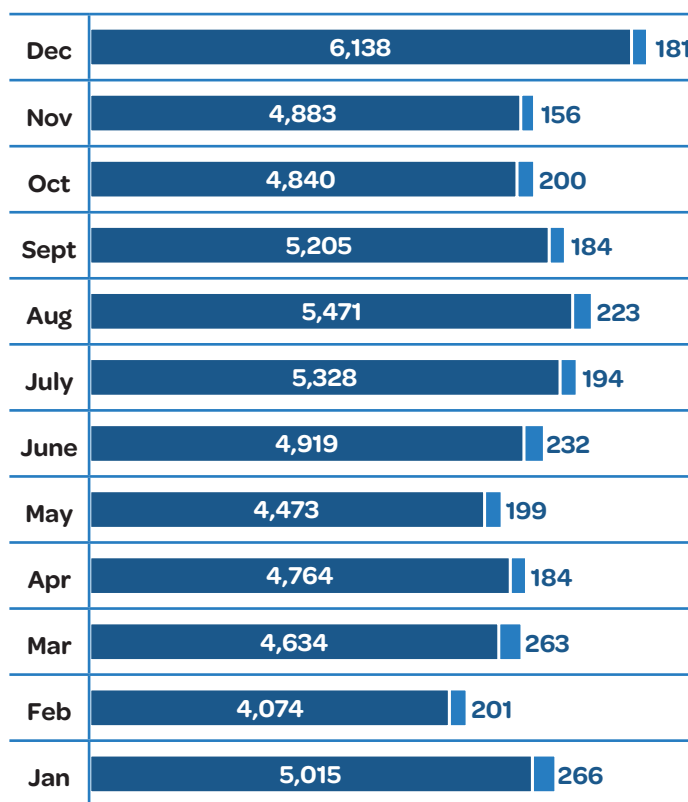
Figure 37. Vital Statistics, 2019

	Number	Rate/Percent	
Births	58,615	12.0	(Per 1,000 Population)
Births to Teenagers	4,002	13.0	(Per 1,000 Females Aged 10-19 Years)
Low Weight Births	6,153	10.5	(Percent of All Live Births)
Births to Unmarried Women	28,326	48.3	(Percent of All Live Births)
Deaths	54,109	11.0	(Per 1,000 Population)
Marriages	32,845	6.7	(Per 1,000 Population)
Divorces	17,738	3.6	(Per 1,000 Population)
Induced Terminations of Pregnancy	7,538	7.9	(Per 1,000 Females Aged 15-44 Years)
Infant Deaths (Neonatal + Postneonatal)	449	7.7	(Per 1,000 Live Births)
Neonatal Deaths (0-27 days of life)	243	4.1	(Per 1,000 Live Births)
Postneonatal Deaths (28-364 days of life)	206	3.5	(Per 1,000 Live Births)

Total estimated state population is 4,903,185.

Figure 38. Alabama's Leading Causes of Death, 2019

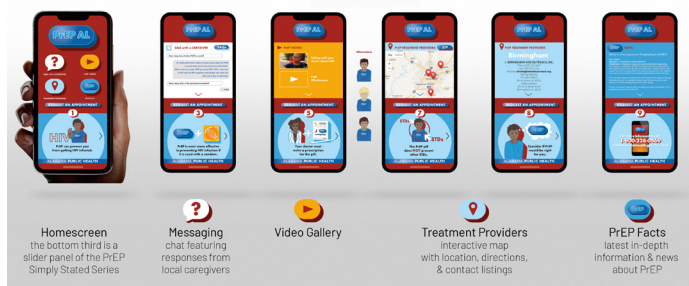| Cause of Death	Rank	Number	Rate[1]	Population
Total		**54,109**		**4,903,185**
Heart Diseases	1	13,445	274.2	
Malignant Neoplasms	2	10,263	209.3	
Chronic Lower Respiratory Diseases	3	3,530	72.0	
Cerebrovascular Diseases	4	3,139	64.0	
Accidents	5	2,757	56.2	
Alzheimer's Disease	6	2,659	54.2	
Diabetes Mellitus	7	1,223	24.9	
Septicemia	8	1,034	21.1	
Influenza and Pneumonia	9	1,018	20.8	
Nephritis, Nephrotic Syndrome, and Nephrosis	10	1,007	20.5	
Chronic Liver Disease and Cirrhosis	11	831	16.9	
Suicide	12	804	16.4	
Essential (Primary) Hypertension	13	624	12.7	
Homicide	14	587	12.0	
Parkinson's Disease	15	571	11.6	
All Other Causes, Residual		10,617		

[1]Rate is per 100,000 population.

OFFICE OF HIV PREVENTION AND CARE

The mission of the office, in collaboration with community partners, is to reduce the incidence of HIV infections, increase life expectancy for those infected, and improve the quality of life for persons living with or affected by HIV. Reducing new HIV infections by 75 percent in 5 years and by 90 percent by 2030 are the goals of a new bold national initiative for 47 counties nationwide, along with San Juan, Puerto Rico; Washington, D.C.; and 7 states including Alabama. These states, counties, and territories are considered priority HIV high burden regions and are the focus of a nationally funded initiative and public health strategy, **Ending the HIV Epidemic: A Plan for America (EHE)**, with multi-year funding appropriations directed to highly impacted communities nationwide.

On December 31, 2020, the EHE Plan 2020-2030 was developed and submitted to the CDC. An EHE Community Planning Committee of statewide stakeholders participated in every phase of developing the strategic plan. The comprehensive needs assessment and community engagement process revealed some overarching themes for the Alabama blueprint plan to include: 1) stigma; 2) education; 3) lack of resources; and 4) cultural considerations for improving health outcomes. The committee will continue to have virtual monthly meetings to assess community needs and monitor the plan implementation activities of the EHE Branch.

The Prevention Division also launched the pre-exposure prophylaxis (PrEP) Alabama application (app). PrEP is a medicine people at risk for HIV can take to prevent getting HIV from sex or injection drug use. This app provides an opportunity for a potential client to communicate with an AIDS service organization that provides PrEP within each public health district. The app includes an interactive map with location, directions, contact listings, and basic information about PrEP.

Homescreen	Messaging	Video Gallery	Treatment Providers	PrEP Facts
the bottom third is a slider panel of the PrEP Simply Stated Series	chat featuring responses from local caregivers		interactive map with location, directions, & contact listings	latest in-depth information & news about PrEP

Alabama continues to experience an HIV epidemic of moderate magnitude when compared to other states. A cumulative total

Figure 39. HIV/AIDS Cases, Alabama 2009-2018

■ Number of Cases   ● Diagnosis Rate per 100,000
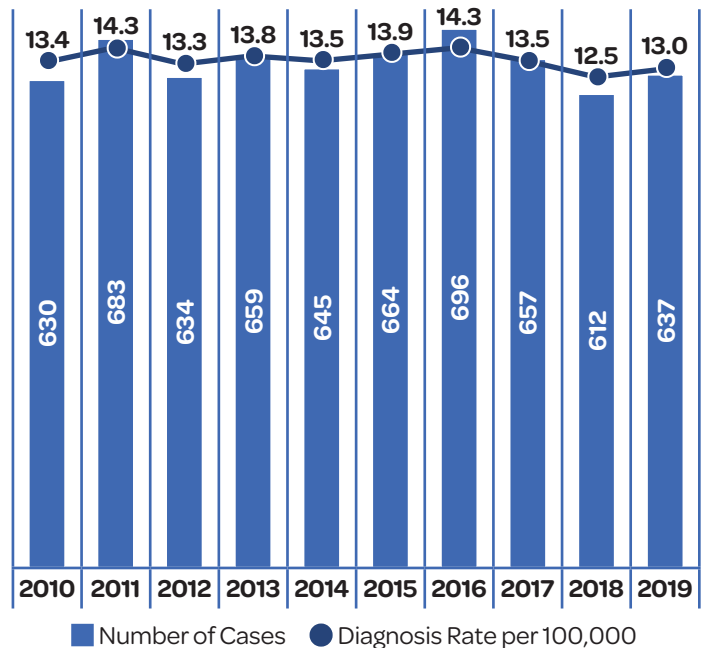
2019 is the most recent year for which data is available.
Source: HIV Surveillance Branch, Office of HIV Prevention and Care

of 22,836 HIV infections have been diagnosed among Alabama residents since reporting began in 1982; as of December 31, 2019, 14,361 individuals in Alabama have been diagnosed with HIV.

The chart above represents reported cases and case rate per 100,000 for the past 10 years. A total of 637 HIV/AIDS cases were reported to the HIV Surveillance Branch, Data Management Division, in 2019. The case count rate is 13 cases per 100,000 population. The rate of HIV/AIDS cases was highest among blacks (35.2 cases per 100,000 population). The rate of HIV/AIDS cases was lower among Hispanics (6.3 cases per 100,000 population) and whites (4.8 cases per 100,000 population). More than 49 percent of the HIV/AIDS cases reported in 2019 were residents of Jefferson (128 cases), Montgomery (80 cases), and Mobile (106 cases) counties.

As of December 31, 2020, the office served 3,746 clients through the Alabama Drug Assistance Program (ADAP). Of that number, 1,105 uninsured individuals received ADAP-funded medications; 2,568 individuals were provided ADAP-funded health insurance; and 73 individuals were provided ADAP-funded Medicare Part D prescription insurance. Presently, 15 providers receive funding through the department to provide core medical and support services to HIV clients.
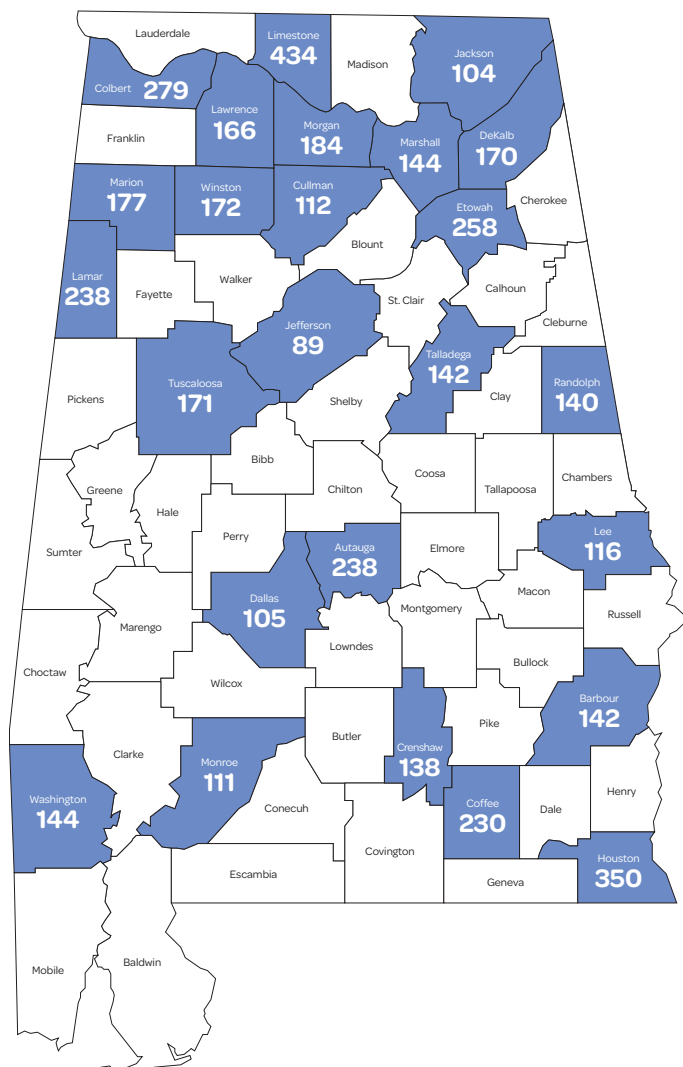
BUREAU OF HOME AND COMMUNITY SERVICES (HCS)

The Alabama Department of Public Health's Homecare Program began serving the citizens of Alabama in 1967. HCS administers home care services statewide to homebound patients. The bureau's mission is to deliver high-quality services and compassionate care provided by competent and professional staff to patients in the home and community setting throughout Alabama.

Patients Served

HCS currently has 25 branch offices across the state responsible for coordinating care among patients, caregivers, and their physicians. HCS administered statewide services to a total of 6,052 patients of all ages from pediatric to geriatric. Moreover, HCS is currently the only agency offering pediatric home care in the state of Alabama.

Home Health Services

Home health services are prescribed by a physician based on medical need. Services are provided by registered nurses, licensed practical nurses, home health aides, and therapists.

Figure 40. Home Health Patients Served by Branch Office, FY2020

Figure 41. Patients Served by Program, FY2020

Remote Patient Monitoring (RPM)
1,498
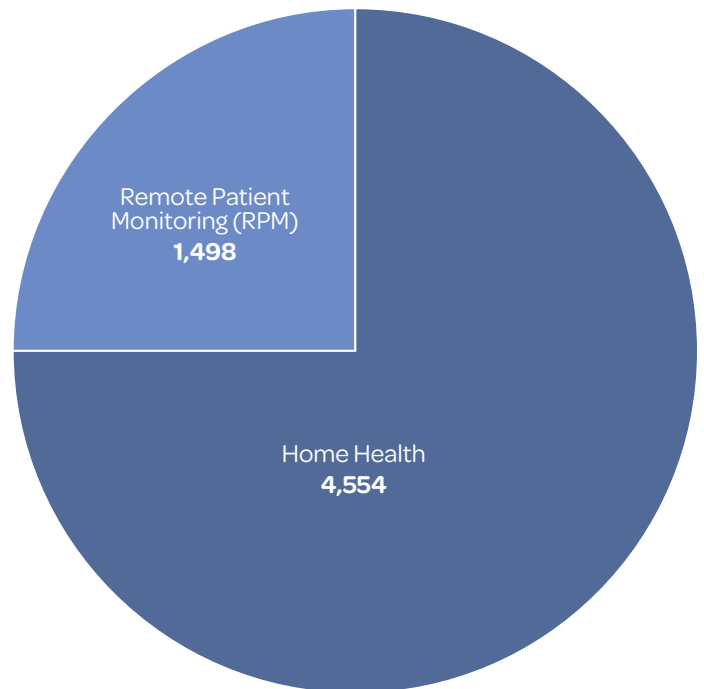
Home Health
4,554

Figure 42. Home Health Patients Served by Age Group, FY2020

19-37 **402**

0-18 **475**

>75 **533**

57-75 **1,897**

38-56 **1,247**
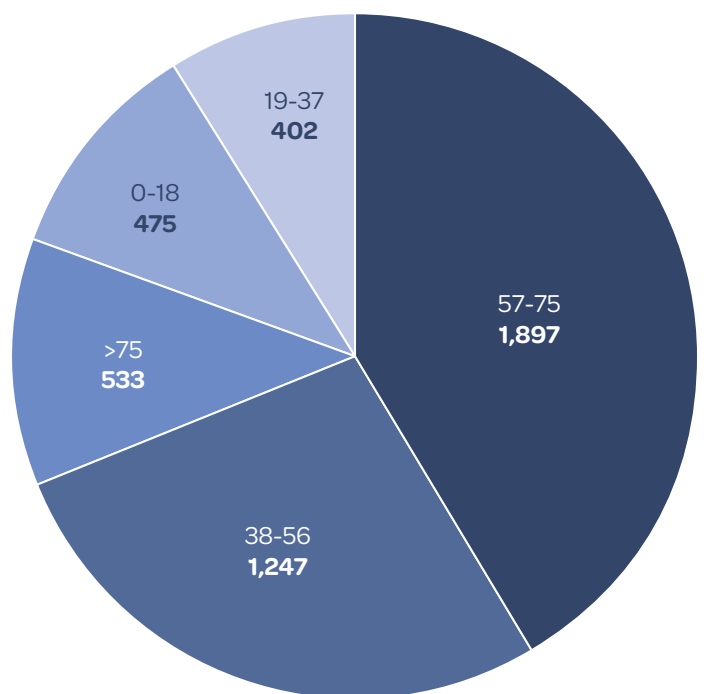
Services include:

- Skilled nursing
- Personal care
- Wound care
- Intravenous therapy
- Diabetic care
- Cardiovascular care
- Post-hospital assessment and teaching
- Urinary catheter management
- Physical, occupational, and speech therapy

Nurses, aides, and therapists of HCS provided a total of 181,296 home health visits statewide to patients covered by Medicare, Medicaid, and other Insurance in FY2020.

According to the Alabama Medicaid Agency's Statistical Support Unit, homebound recipients received a statewide total of 208,913 home care visits from multiple home care agencies in FY2020. HCS provided 156,530 home care visits to patients who are covered by Medicaid, 75 percent of Alabama Medicaid Agency's statewide total.

Remote Patient Monitoring (RPM) Service Hours

The RPM Program combines resources from ADPH Home Care, the Alabama Medicaid Agency, and the University of South Alabama to provide an in-home monitoring service for specific chronic illnesses. Medicaid patients who have congestive heart failure, diabetes, and hypertension qualify for the in-home monitoring program. The goal of RPM is to decrease exacerbation episodes, emergent care visits, hospital admissions, and costs. HCS's RPM managers provided a total of 17,209 RPM service hours.

Figure 43. Home Health Visits by Discipline and Payor, FY2020

	Medicare	Medicaid	Other
Home Health Aide	4,521	76,343	1,694
Physical Therapy	4,474	10	1,235
Skilled Nurse	9,808	80,177	3,034

Figure 44. Alabama Medicaid Home Health Visits Statewide, FY2020

Other Private Home Care Agencies
52,383

Home and Community Services
156,530
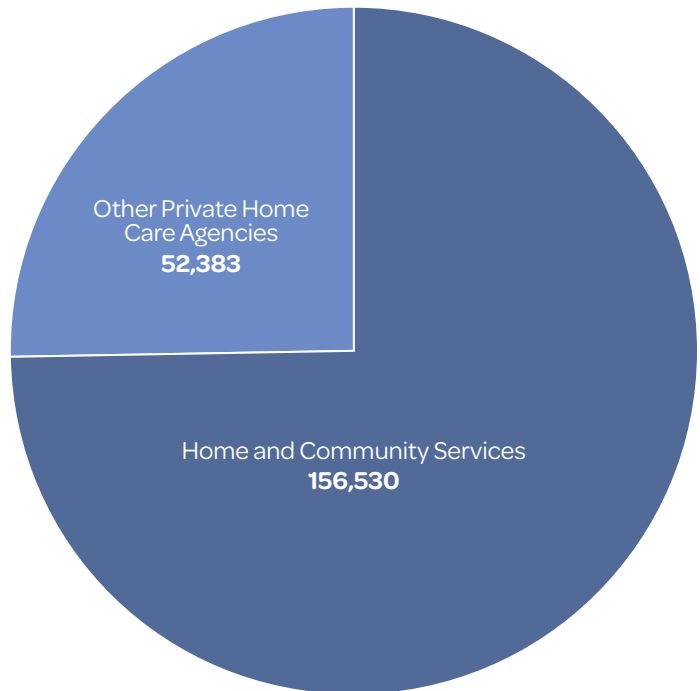
OFFICE OF HUMAN RESOURCES

The Office of Human Resources worked with great persistence during the year 2020 processing requests for personnel actions, such as new hires, promotions, transfers, leave reports, performance appraisals, disciplinary actions, and dismissals. The office coordinated the State Employee Injury Compensation Trust Fund Program and served in various roles to assist in the COVID-19 pandemic response.

The Employee Relations Section provided guidance to employees and supervisors in resolving workplace conflicts, coordinated the Employee Assistance Program (through referrals), the department's Recruitment Program, and the Affirmative Action Program. The section also received, reviewed, and provided guidance and training in resolving workplace complaints and grievances, U.S. Equal Employment Opportunity Commission charges, Americans With Disabilities Act accommodation requests, and shuttle service requests. In addition, the section received, reviewed, and investigated general, anonymous, and civil rights complaints; participated in administrative hearings; and responded to allegations of unfair practices.

Staff assisted with COVID-19 pandemic response, and the duties of the staff included the following: reassigned staff to assist the incident command with the COVID-19 call center, warehouse duties, and deliveries; assisted in staffing the test assembly teams in the warehouse and in finding drivers to deliver test kits; made deliveries of COVID-19 test kits and remdesivir; developed, staffed, and coordinated the COVID-19 call center and e-mail teams; and delivered and retrieved a truck for the Center for Emergency Preparedness. The COVID-19 call center has received more than 42,000 calls from Alabama's businesses, citizens, healthcare providers, the education sector, as well as from other states from March through the end of 2020. The e-mail team responded to approximately 4,238 e-mail inquiries.

2020 Service Activities

- Attended 4 career fairs.
- Conducted "Interview and Selection" training for approximately 79 supervisors.
- Conducted "Performance Appraisal" training for approximately 87 supervisors.
- Conducted "Family and Medical Leave Act" training for approximately 81 supervisors.
- Conducted "Discipline Process" training for approximately 90 supervisors.
- Conducted "Work Life Balance" training for approximately 132 employees.
- Developed "Understanding Yourself - the Key to Success" training for approximately 27 employees.

ADPH Minority Employment Comparison

The department is comprised of 2,314 merit system employees; 39.5 percent are minority employees. According to the State of Alabama Personnel Department, 2019 Annual Report, the department is comparable to the state minority percentage of 42.9 percent. (Source: State of Alabama Personnel Department, Annual Report 2019.)

Figure 45. 2020 Personnel Actions Processed for Merit Employees

New Hires	265
Promotions	165
Dismissals	30
Retirements	151
Transfers Out	73
Other Separations	172
Employee Assistance Program Referrals (employees and dependents)	107
Hours of Leave Donations	2,475
Annual Appraisals	2,023
Probationary Appraisals	363

Figure 46. Alabama Labor Market (LM) vs. ADPH, 2020[*]

Category	LM	ADPH
Officials and Administrators	23.37	24.71
Professionals	25.26	38.72
Administrative Support	51.37	50.54

LM ADPH [*]Minority Percentage in Category
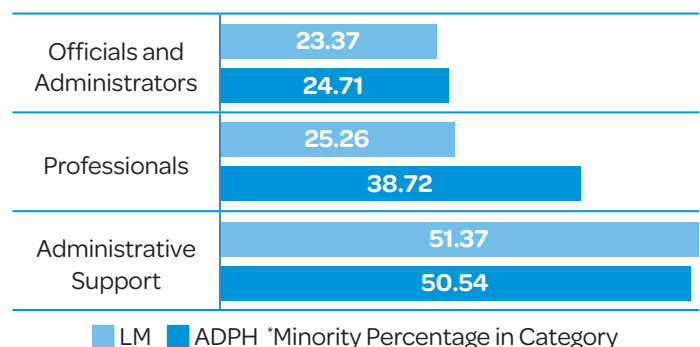
Figure 47. 2020 Turnover Rates in Districts and Central Office

	Total Employees	Turnover Rate (%)
Central Office	998	4.5
Districts	1,313	4.5
Statewide	2,311	4.5

BUREAU OF INFORMATION TECHNOLOGY (IT)

The bureau's mission is to plan, provide, and support the information and logistics needs of the department. IT's five divisions procure, develop, and support information technology systems to supply information to department and public users through an integrated information processing and telecommunication structure.

The Logistics Division manages the department's property assets, forms, emergency preparedness supplies, mailroom services, and vehicles. This division has the responsibility of auditing every property item assigned to the department statewide. Dedication to maintaining accountability of all assigned property items can be affirmed by its achievement of 18 years of perfect property audits with the State Auditor's Office.

The Technical Support Division (TS) completed a year-long project which included the installation of all network wiring and wireless networking to the new BCL facility in Prattville. TS staff moved all servers, computers, and lab instruments to the new lab, and all computer equipment for the three offices which were relocated to the new Administrative Annex and Training Center. The remaining 20 percent of the department's Windows 2008 servers were replaced or upgraded during FY2020. All ADPH firewalls, ADPH core switches, RSA Tower floors switches, and wireless access points were replaced. TS finished its Windows 10 conversion in January 2020 and re-imaged old Windows 7 laptops to Windows 10 so that they could be used by ADPH employees in COVID-19 support. The division provided equipment and help desk support to all ADPH employees authorized to work remotely during the COVID-19 State of Emergency, helped with internal moves within the RSA Tower, and assisted the Alabama Army National Guard in support of COVID-19 response.

ADPH continued its partnership with the Alabama Medicaid Agency to provide resources and support for the Alabama Promoting Interoperability Program. Since its inception in 2014,

this program continues to evolve and improve users' ability to monitor outbreaks, enter and evaluate data, access data for reporting, and send or receive data to multiple public health registries and systems securely in this continually growing partnership. The number of queries and messages processed by the interface engine, Rhapsody, continues to grow as well. Rhapsody processed 263,892 ASCR messages, 2,932,690 IMM updates, and 8,154,120 IMM queries.

The Business and Information Architecture Division (BIA) continues to look for ways to enhance and improve user experience, functionality, security, and responsiveness of the different systems supported. Noted here are a few examples of some of these enhancements during 2020:

- Partnered with UAB in providing data for the GuideSafe mobile app. GuideSafe uses the Exposure Notification Interface which was jointly developed by Google and Apple to alert Alabama residents who download the app of a possible COVID-19 exposure. BIA has a scheduled hourly process to pull the phone numbers from the Alabama NEDSS Base System for persons with positive COVID-19 lab results within the past 10 days. The phone numbers are then masked by ADPH using a masking

Figure 48. Logistic Support Facts – 2020 and 2019 Comparison

Logistics Items Reported	2020 Quantities	2019 Quantities
Equipment Inventory Items	23,242	20,162
Equipment Inventory Value	$47,860,484	$42,967,007
Forms Managed	2624	1,969
Form Packages Sent	4272	4,756
Promotional Items Managed	1797	600
Department Vehicles	60	57
Emergency Response Vehicles, Trailers, etc.	88	82

Figure 49. IT Support Facts – 2019 and 2018 Comparison

IT Support Items Reported	2020 Quantities	2019 Quantities
Help Desk Calls	29,376	39,569
Personal Computers/ Laptops Supported	5407	5,799
Windows Servers Supported	397	412
Personal Computers/ Laptops Installed	5007	2,523
WAN Support Completed Work Orders	1979	2,763
IP Phone Devices Supported	5266	5,784
Windows 2016 Servers Deployed	82	282
Smart Phones Supported	914	766
Technical Support Projects Completed	15	13
Voice Mail Boxes Supported	2659	2,660
Statewide Antivirus/Encryption Upgrades	4267	1,475
IP Gateways Supported	78	78
WAN Support Miles Driven	136,347	169,747

Figure 50. 2020 Syndromic Surveillance (SS) Messages by Month

Month	Messages
Jan	165,476
Feb	254,753
Mar	307,504
Apr	236,104
May	332,160
June	669,150
July	808,772
Aug	837,364
Sept	1,254,759
Oct	1,409,667
Nov	1,371,005

Figure 51. 2020 Electronic Lab Reporting (ELR) Messages by Month

Month	Messages
Jan	1,883
Feb	1,964
Mar	2,018
Apr	7,595
May	17,948
June	35,646
July	52,680
Aug	97,186
Sept	55,569
Oct	73,381
Nov	75,211

Figure 52. Registration Breakdown by Program

Program	2020 Eligible Professionals Additions	Total Eligible Professional Count	2020 Eligible Hospital Additions	Total Eligible Hospital Count
Immunization	113	12,970	0	94
Electronic Lab Reporting	NA	NA	2	96
Syndromic Surveillance	85	4,518	0	93
Alabama Statewide Cancer Registry (ASCR)	68	4,801	2	37
Electronic Case Reporting	55	316	17	20
PDMP	155	436	15	15
Other Specialized Registries	37	539	1	8

algorithm and sent to UAB electronically. When persons positive for COVID-19 self-report their result via the app, the app uses the same masking algorithm used by ADPH. UAB compares the masked phone number of the persons reporting their results to the masked phone number electronically submitted by ADPH. If a match is found, then the positive result is confirmed, and other people whose phones came within 6 feet of the infected person for at least 15 minutes are notified of the exposure, while maintaining complete patient confidentiality. This work has been recognized in multiple national forums where UAB has presented the workflow. Other states/jurisdictions have expressed interest in using a similar methodology to the ADPH/UAB collaboration.

• Developed an alternative nontraditional method for receiving electronic lab reporting. The COVID-19 pandemic introduced many challenges and burdens regarding Electronic Laboratory Reporting (ELR) and the ability to obtain adequate yet secure test reporting in the standard Health Level 7 (HL7) format. Numerous facilities performing COVID-19 testing experienced interface issues or remained unable to generate HL7 compliant result messages. In addition, the changes with reporting requirements from the U.S. Department of Health and Human Services for COVID-19 created an immediate need to ensure that all facilities could electronically report to the state. The BIA interface team developed a comma separated value (CSV) ELR solution for this purpose. The CSV files are received from the reporting facilities via secure file transfer protocol. These files are then processed and converted into individual HL7 messages using Rhapsody (interface engine) that automatically feeds into ALNBS. This process has transformed the electronic reporting technique,

enabling all facilities (labs, hospitals, clinics, urgent cares, nursing homes) to electronically report to ADPH. Electronic reporting is growing at an enormous rate. The number of COVID-19 tests increase daily, as does the onboarding of new reporting facilities and the need for nontraditional methods like CSV ELR. Overall, the CSV onboarding has attained 106 new reporting facilities since the emergence of COVID-19.

- Provided the updated technology to generate electronic watermarks on official documents. The Radiation Inspection Safety Enforcement (RISE) app has saved the department thousands of dollars in purchasing watermark paper and played a pivotal role during the COVID-19 State of Emergency. It was the only system the Office of Radiation Control (ORC) relied on to continue issuing licenses and renewals during the State of Emergency. It enables document sharing among staff including primary and secondary reviewers. In addition, the RISE app played a major role during the office's relocation. The application was used to electronically archive a large portion of the ORC's official documents using new document management technology which enabled the office to relocate fewer paper documents to the new site. RISE has streamlined the billing process of the department, enabling the maintenance of electronic copies of all invoices, receipts, financial records, and outstanding payments. Expenses have been reduced with the capability to print envelope labels instead of purchasing window envelopes. Lastly, with regular updates and patches, the app is continuously being assessed to provide the highest quality performance for its users.

- Created an inventory system to track COVID-19 specimen kits at the district and county levels. This system allows users to load inventory to the district level then distribute the kits to the counties. It allows the users to transfer kits from one county to another or one district to another. This system also allows ADPH to keep up with how many COVID-19 kits are used by each county, with the exception of Mobile and Jefferson counties.

- Implemented a new Environmental Bite module. This module lets users enter data for a victim, owner, or reporting person that is involved in reporting an animal bite. Through this

system, public health environmentalists are able to streamline their workflow with fewer screens and interactive grids that show all the data that was entered.

- Implemented the Wellness Entry Login Link (WELL) system which has captured and transmitted over 14,775 flu vaccine reports to ImmPRINT since September 1, 2020. The number of flu vaccines captured and transmitted daily continue to increase. BIA also worked with the Wellness team to develop an application that allows the team to capture wellness information electronically instead of on paper forms.

- Enhanced the Finance Accounting and Cost Table app (FACT) to provide additional financial management capabilities for ADPH Finance. Also, modifications to TimeTrac began during FY2020. One of the main changes will include adjustments to the Employee Weekly Leave Documents (EWLD).

- Completed the migration of ORC documents into the Laserfiche Directory Server. BIA also facilitated the Image API move to Laserfiche for two offices.

- Completed and deployed the ID&O COVID-19 Surveillance Dashboards. As a result of this deployment, BIA is responsible for updating and reporting daily changes to COVID-19 numbers along with updating COVID-19 testing site locations and testing site times. BIA was also instrumental in the deployment of the following dashboards - AIMS Hospital Status Internal Dashboard, COVID-19 Vaccine Distribution Planning Dashboard, Risk Indicator External Dashboard, and K-12 School External Dashboard. These dashboards have become an important communication tool and play an important role in how ADPH shares valuable information with the public and business partners and serve as a decision support tool for Alabama state leadership.

- Deployed Tableau servers for internal and external use by ID&O staff. Tableau is an analytical tool used by epidemiologists for disease surveillance. It is a visualization tool that helps to convert data into a form that is easier to understand and convey to others.

BUREAU OF PREVENTION, PROMOTION, AND SUPPORT

Behavioral Health

Injury Prevention and Youth Tobacco

The goals of the Alabama Child Passenger Safety Program are to educate Alabamians on the safe use of child passenger restraints, provide training for individuals to become certified child passenger safety technicians, and establish car seat fitting stations at specific locations around the state through a grant from the Alabama Department of Economic and Community Affairs. With the grant, ADPH established 18 new car seat fitting stations that are managed by 6 local public health district coordinators. Car seat fittings and technician trainings were suspended for most of 2020 because of COVID-19 and temporary staff reassignment as a result of ADPH's COVID-19 response.

The Rape Prevention and Education Program, funded by the CDC, provides prevention of sexual violence perpetration and victimization by decreasing sexual violence risk factors and increasing protective factors for the general population in 39 Alabama counties through grants to the Alabama Coalition Against Rape (ACAR) and 10 rape crisis centers. The Preventive Health and Health Services Block Grant provides crisis intervention services to rape victims; in-service training for law enforcement, social services, and medical professionals; and training for community volunteers to respond to victims of sexual assault in the state in 28 counties through grants to ACAR and 6 rape crisis centers. Through this work, more than 11,000 youth and young adults have been reached.

COVID-19 presented challenges for prevention educators at rape crisis centers in 2020 because much of the service involves working with the public. As a result, rape crisis centers began doing more community-level work that involved changing social norms and environments as opposed to educating the public in classroom settings, and trainings were conducted on virtual platforms to ensure the safety of the educators and the public.

In 2018, suicide was the eleventh leading cause of death in the state, with 823 citizens lost to suicide, compared to 567 deaths due to homicide. The Alabama Youth Suicide Prevention Program began its fourth year working to reduce the rate of suicides and suicide attempts for youth ages 10 to 24. The program provides grants to crisis centers, the state suicide prevention coalition, and colleges and universities to provide education, outreach, screenings, and referrals to promote suicide prevention, awareness, and services in communities throughout the state. In 2020, suicide prevention program partners conducted 223 trainings, resulting in 4,827 individuals trained as gatekeepers to identify and refer individuals at risk for suicide. Trainings were put on hold in spring 2020 because of Stay at Home and Safer at Home orders suspending certain public gatherings due to

the risk of COVID-19 infection, but program facilitators were able to move gatekeeper trainings to virtual platforms so that trainings could be conducted virtually beginning in fall 2020.

Surveillance

The Alabama Child Death Review System (ACDRS) reviews and identifies unexplained or unexpected child deaths in Alabama with the purpose of developing strategies to prevent such deaths from occurring. Forty-two local child death review teams throughout the state review child death cases each year. During the years 2016 through 2018, ACDRS reviewed 181, 233, and 210 cases respectively. In FY2020, ACDRS produced the program's 2016, 2017, and 2018 progress reports. The reports identified motor vehicle incidents; sleep-related deaths; and firearm, weapons, and assault-related deaths as the three leading causes of death for children in Alabama.

In August and September, ACDRS sponsored two virtual continuing education training opportunities through the Alabama Public Health Training Network. The first training was titled Engaging and Educating Parents on Safe Sleep and Car Safety for their Young Children. The second training was titled Unexplained Pediatric Deaths: Investigation, Certification, and Family Needs: Procedural Guidance and Key Considerations developed by the National Association of Medical Examiners' Panel on Sudden Unexpected Death in Pediatrics. Over 350 people registered for the training.

In FY2020, the Medical Association of the State of Alabama appointed one new member to the ACDRS State Team. The program continues to partner with the University of Alabama at Birmingham and the University of South Alabama on prevention efforts in the state. ACDRS continues to work to make strides that reduce child deaths in Alabama through awareness, education, and prevention efforts. Due to the COVID-19 pandemic, the program's bi-annual training conference was cancelled.

The Alabama Violent Death Reporting System (AVDRS) is a statewide surveillance program in its fifth year of collecting data. Data providers for the program include law enforcement, coroners/medical examiners, the Alabama Department of Forensic Sciences, and district attorneys. A unique feature of the program is the ability to examine and analyze circumstances surrounding violent deaths. The major goal of AVDRS is to assist with developing and improving violence prevention programs in the state by providing data on trends and characteristics of violent deaths.

In 2018, the state of Alabama had approximately 1,390 violent deaths; that number increased to 1,449 in 2019. AVDRS also works in collaboration with the Overdose Data to Action Grant to conduct surveillance of drug overdose deaths in the state. Through this collaboration, more timely and comprehensive data on drug-related deaths can be provided in the state. To

assist data providers in understanding the needs of AVDRS, a training module has been produced for state coroners/medical examiners and law enforcement. In late 2020, AVDRS developed a fact sheet titled an Overview of Violent Deaths in Alabama, 2018. AVDRS shares data and information with its data providers, advocacy groups, legislators, and other interested parties.

The Food and Drug Administration (FDA) Tobacco Inspection Program is in its tenth year of a contract with the FDA's Center for Tobacco Products to conduct inspections to ensure tobacco permit holders comply with the requirements of the Tobacco Control Act. Due to COVID-19, inspections were only conducted in 3 months of 2020. In FY2020, staff conducted 193 advertising and labeling inspections of all tobacco retailers in the state to ensure they are following federal law when advertising, displaying, and selling regulated tobacco products. The department's sub-grantee, the Alabama Law Enforcement Agency, conducted 1,577 undercover buys by accompanying a minor who attempts to make a tobacco purchase. Every tobacco retailer in the state is inspected with the assistance of a trained, age-appropriate, undercover minor to determine if the teenager can purchase tobacco products in violation of the Tobacco Control Act of 2009. The program has 4 credentialed advertising and labeling inspectors and 26 undercover buys inspectors. In a short 3-month period, the program conducted 1,770 inspections, which revealed a combined violation rate of 13 percent.

Youth Tobacco
Youth Risk Behavior Survey data for 2019 was provided by the Alabama State Department of Education. The data indicated that 7.1 percent of Alabama high school students currently smoke cigarettes, a significant decrease from 14 percent in 2015; 23.4 percent of Alabama high school students indicated that they stopped smoking for 1 day or longer, because they were trying to quit smoking cigarettes for good; 19.4 percent of Alabama high school students currently use electronic vapor products; 33.8 percent of Alabama high school students think young people who smoke cigarettes have more friends; 19.4 percent of Alabama students had used an electronic vapor product, including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens on at least 1 day within the 30 days before the survey; and 7.1 percent of Alabama students smoked cigarettes on at least 1 day within the 30 days before the survey. The Youth Tobacco Prevention Program was awarded approximately $1.5 million to implement a grant program to effect social norm change around tobacco use, address the marketing of emerging products to youth, promote policies that protect youth from nicotine initiation and exposure to secondhand smoke, and promote tobacco cessation.

Youth Tobacco Prevention Program grantees delivered 28 presentations based on the Stanford Medicine Tobacco Education Curriculum. In conjunction with the presentations, 1,193 pre/post tests were completed by youth in Grades 6-12. Schools were moved to an online format in March 2020 in response to the COVID-19 pandemic, and as a result, Youth Tobacco Prevention staff were unable to make presentations or complete the curriculum within the schools for the remainder of the school year. Youth Tobacco Prevention Program grantees organized or participated in 129 community awareness activities such as local coalition meetings, health fairs, and National Kick Butts Day. Paid magazine ads focused on vaping produced approximately 56,250,355 social media impressions throughout the state of Alabama. Social media played a very important role in educating individuals since in-person information was limited. The ADPH Healthy Teens website had approximately 409 views.

Approximately 486,276 individuals were reached through the Alabama You Choose and ADPH Facebook pages and ADPH tobacco-related websites. In partnership with a local media company, the youth program's mass media campaign launched in August 2019. The message was aimed at addressing the youth vaping epidemic. This campaign was successful and yielded approximately 1,661,730 impressions through television, streaming services, and online videos. The videos were aired on frequently viewed websites and networks. On television, the media spot was aired 14,032 times on 58 networks targeting youth. There were 767,682 impressions on streaming services with a 98.10 percent (753,061) video completion rate. Online videos yielded 894,048 impressions with a 78.99 percent video completion rate. Online videos also yielded 2,454 click-throughs to the website on desktop, mobile, and tablet devices.

Tobacco Prevention and Control
Tobacco use continues to be the leading cause of preventable death in Alabama, killing in excess of 8,600 smokers and costing the state more than $1.88 billion in direct medical expenses to treat smoking-related diseases each year. The Tobacco Prevention and Control Program works to help tobacco users quit, prevent youth and young adults from starting tobacco use, and protect people from exposure to secondhand smoke. The program utilized resources to help quit by obtaining Medicaid reimbursement for Quitline services, a $305,371 grant from CDC to build Quitline capacity, and $573,181 in state funds to provide up to 8 weeks of nicotine replacement therapy patches, conduct targeted outreach efforts, and support the Alabama Tobacco Quitline.

Tobacco staff participated in COVID-19 response efforts, conducting investigations, investigation assignments, and supporting COVID-19 activities at the local level. Quitline numbers were down due to COVID-19, and tobacco coordinators were not able to educate as many people due to Alabama's Stay at Home order. Tobacco coordinators have regrouped and have been trained on conducting presentations virtually to reach the needs of the community.

Center for Emergency Preparedness (CEP)
CEP is responsible for coordinating disaster preparedness and response for the department and serves as the coordinating entity for Emergency Support Function 8, Health and Medical, for the state during emergency responses. CEP is funded solely by federal grants.

• CDC provided $8,612,317 during FY2020-2021, in a cooperative agreement to provide overall direction to and management of the department's assessment and planning for the department's response to acts of terrorism, outbreaks of disease, and other public health threats and emergencies such as meteorological, geological, chemical, and radiological disasters. This funding is scheduled to end June 30, 2021.

- In addition, CDC provided $8,148,799 in a Coronavirus Preparedness and Response supplemental appropriation to carry out surveillance, epidemiology, laboratory capacity, infection control, mitigation, communications, and other preparedness and response activities due to COVID-19. CEP, the BCL, and the ID&O Division collaborated to use these funds in the most efficient manner possible, not knowing this was only the beginning of the funding streams that would be used to fight this pandemic. Funding ended March 15, 2021; however, there is a possibility of extending the funding period through FY2022.

- The Assistant Secretary for Preparedness and Response Hospital Preparedness Program provided $3,101,328 in a cooperative agreement with the department for FY2020-2021. These funds were designated to enhance healthcare system capability and capacity and preparedness for naturally occurring disasters or acts of terrorism resulting in mass casualties. The majority of this funding is used in the Health Care Coalition to fund projects at the local level throughout Alabama. In addition, the federal program funded an additional $1,999,871 in supplemental funds to support the urgent preparedness and response needs of hospitals, health systems, and healthcare workers on the front lines of the COVID-19 pandemic. This funding is scheduled to end June 30, 2021.

- The CARES Act authorized $150 billion through the Coronavirus Relief Fund for state and local governments, which included approximately $1.8 billion for Alabama. This funding, referred to as Governor's CARES Funding, helped CEP purchase much-needed equipment, supplies, facilities, and services during the pandemic. A total of $14,656,000 was requested for CEP. Funding ended December 30, 2020.

Years of planning and exercise have prepared ADPH to respond to the current COVID-19 pandemic. This response is the largest and most complex response in the history of ADPH. Early in the response when personal protective equipment (PPE) was in high demand with a low supply commercially, ADPH shipped its stockpile along with PPE supplies delivered to Alabama through the Strategic National Stockpile program to the healthcare community. ADPH also coordinated with the state's nine healthcare coalitions to share resources among facilities. As the pandemic progressed, ADPH joined with the Alabama Emergency Management Agency and the Alabama National Guard to form a Unified Command to address the needs of the residents of Alabama. Through this cooperative effort, including support from the Governor's Office and other state agencies, these resources were used to purchase, warehouse, and distribute PPE across the state to enable the healthcare system to remain operational. The Alabama Incident Management System which was previously developed by ADPH in cooperation with the University of South Alabama, was utilized to monitor healthcare facility status and needs, as well as to coordinate bed availability, supplies, and other resources within the healthcare system.

ADPH is also spearheading the effort to vaccinate Alabama's residents against COVID-19. CEP continues to evaluate and improve response efforts leading Alabama's response to COVID-19.

Health Media and Communications

Public information and emergency messaging were a vital part of the department's pandemic response efforts in 2020, and the division endeavored to ensure and maintain transparency and trust from the public during this critical time. The Alabama Public Health Training Network (ALPHTN) provides departmental training, educational resources, public information, and emergency response through live broadcasts and production services. ALPHTN hosted news conferences in its in-house studio and provided communications support to the office of Governor Kay Ivey.

The department increasingly relied on computer-based platforms and virtual communication during 2020, as the COVID-19 pandemic made it challenging to hold in-person trainings and meetings. A total of 115 video conferences were held for the year, a much larger number than in previous years because of travel limitations. The studio offered the technical capabilities to provide instruction virtually. COVID-19-related programs included Addressing the Needs of Older Adults in the Age of COVID-19, Addressing the Needs of Consumers with Substance Use Disorder in the Age of COVID-19, Living with HIV in the Age of COVID-19, Self Care in Challenging Times, Ethical Issues in the Age of COVID-19, Focusing on Employee Safety While Responding to COVID-19, and multiple programs to train school nurses, administrators, and faculty on the COVID-19 School Toolkit produced by ADPH. These programs were made available on-demand on the department website.

In July 2020, the division began its third year of a 4-year agreement serving as a community-based training partner with the Region IV Public Health Training Center located at the Rollins School of Public Health at Emory University in Atlanta, Georgia. The division works collectively as a network with Emory, along with other partners and technical assistance providers to improve the ability of the public health workforce to meet national, state, and local needs. Sets of monthly public service announcements were recorded and distributed to a network of radio stations throughout the state.

Marketing efforts included preparing and distributing 10,000 yard signs for display in communities throughout the state. The messaging reminded citizens that the COVID-19 pandemic has not ended, and they should continue to wear masks and practice social distancing. A "COVID Doesn't Care" advertising campaign was aired in media outlets statewide. With the assistance of division staff, state-of-the-art electronic signs were ordered for installation at county health departments statewide. In addition to providing general information, these signs are used for educational messaging purposes regarding COVID-19. Marketing staff also formatted the daily COVID-19 case characteristics, the weekly risk indicator table and map, and health orders for the COVID-19 dashboard.

One of the goals of the division's Digital Media Branch is to ensure departmental promotion, education, and dissemination efforts are reaching the broadest possible audience in the quickest, most efficient manner. Specific departmental programs, marketing/promotional campaigns, and events are promoted on the department's website (alabamapublichealth. gov); social media networks (Instagram, Facebook, Pinterest, Twitter, and YouTube); and mobile apps.

Due to the COVID-19 response, the branch disseminated an unprecedented amount of information through graphics and social media messaging. There were dramatic increases in the number of followers on ADPH social media accounts:

- Facebook went from 12,294 likes to 64,624 likes, with 106,059 following the page.
- Twitter followers increased from 2,637 to 17,200.
- Instagram followers grew from 1,058 to 3,720.

Toward the end of 2020, the branch began research and development for a redesign of the department's website. The redesign is on track to be completed first quarter of 2021.

The focus of the Public Information Branch in 2020 was to encourage Alabamians to adopt and consistently practice critical public health measures to prevent the transmission of COVID-19. Inquiries were received from local, state, national, and international news media outlets and the public, and staff coordinated the dissemination of information from trusted spokespersons who responded to numerous interview requests from the mass media on a near daily basis. Activities included informing the public about the status of the virus, recommending COVID-19 prevention measures, describing policies and protocols, announcing screening schedules, and other recommendations and referrals, including public records requests.

In addition, ways to prevent disease and injury and enhance health were promoted in a variety of news releases and articles. Subjects included daily, weekly, and monthly health observances; and campaigns such as the need for influenza immunizations. Staff prepared and distributed 275 news releases, 228 of which were for COVID-19, and edited a variety of documents in 2020.

Management Support

The Office of Management Support (OMS) provides leadership and coordination for critical departmental programs such as: Records Disposition Authority, Grant and Budget Management, Policy Clearinghouse, and Competitive Selection Process. Major programs in OMS also include Public Health Accreditation, Strategic Planning, Performance Management, Quality Improvement (QI), and Workforce Development (WFD).

Most of the OMS staff were activated for COVID-19 response efforts for a large portion of the year. Because of their familiarity with QI concepts, they were able to provide COVID-19 teams with process design, process improvement, and logistics coordination, allowing the department to quickly respond to the rapidly changing COVID-19 environment.

Public Health Accreditation

In 2020, planning and preparation for reaccreditation through the Public Health Accreditation Board (PHAB) continued. The accreditation coordinator utilized guidance from PHAB to develop internal training to enable the department to provide low-cost training for the accreditation teams. This training was first provided in March 2020 and again in December 2020. The time in between was largely spent on COVID-19 response

efforts. Work toward reaccreditation started again in October with an adjustment of the milestones set by these teams. The reaccreditation application is due in 2022, so teams will be working heavily toward this effort in 2021 and early 2022.

Strategic Planning

The ADPH Strategic Plan was updated and released in February 2020. Projects were identified for 2020, but staff were largely unable to move forward due to the response to COVID-19 tasking most of those staff with response duties. The effort will continue in 2021 with the identification of annual planning teams that will work toward goals selected by the State Health Officer.

Performance Management

In late 2019, ADPH decided to adopt and implement the Results Based Accountability (RBA) model for performance management efforts. RBA is a common-sense approach that encourages a focus on collaborative work with community partners to impact health outcomes. In 2020, the Performance Management staff worked toward obtaining specialized training and developing materials to provide training internally, guide the adoption of RBA principles, and ensure successful implementation of the core concepts of RBA. In December 2020, a council was established to guide this process and allow staff from throughout the department to have a voice in the development of this process.

QI

QI training continued to be provided to departmental staff, with 2020 bringing the opportunity to add virtual sessions. Adaptations were made based upon participant feedback and knowledge gained through the QI Team's participation in QI-specific enrichment activities. In April, QI Training Team members were redirected to assist in COVID-19 relief efforts. In September 2020, the team returned to program work and obtained the necessary resources to transition its trainings to a virtual format. Twelve training sessions were made available to staff in 2020. The QI Training Team provided one-on-one coaching to train a staff member in group facilitation and coached one QI team. One-on-one training, group training, and team building training continues to be offered to ADPH staff.

WFD

The WFD Program offers training programs and initiatives designed to help departmental employees deliver high quality public health services. The program's goal is to strengthen the performance and capacity of the department workforce so that the ability to serve customers increases.

Through the program, staff training is offered on a continuous basis by ADPH and partners such as the State Personnel Department. Two new soft skills training courses were developed and made available to staff across the state. "Work Life Balance" and "Understanding Yourself – the Key to Success" courses were developed based on training gaps identified through an internal needs assessment survey. In addition, the program offers an integrated, online Learning Management System platform through Healthicity, a healthcare compliance management system. Healthicity's training center module offers 60 courses for various training needs. The platform is also used to provide customized training created by ADPH.

Departmental employees participated in Toastmasters International, a world leader in communication and leadership development, to hone their skills. During 2020, 13 employees participated in training sessions through the Tower Toastmasters training program in which participants were provided a mutually supportive and positive learning environment in which individual members had the opportunity to develop oral communication and leadership skills to foster self-confidence and personal growth. Fifty-one training sessions were held in which employees had an opportunity to communicate effectively by delivering speeches, providing and receiving performance evaluation feedback, and completing leadership projects. Participants attained a list of accomplishments, and Tower Toastmasters was represented in leadership roles at the local and division levels. Tower Toastmasters earned the highest level of achievement from Toastmasters International in 2020 as a President's Distinguished Training Program for the seventh consecutive year.

To recruit and retain a highly skilled workforce, the department hosts students enrolled in educational institutions as interns. Through the internship program, individuals are offered an opportunity to make a positive contribution and to develop professional skills and experience. The internship experience offers an opportunity for students to learn about the role and responsibility of public health, earn educational credits, gain valuable work experience, and explore careers in public health. The department works with various educational institutions to provide nonclinical internship placements throughout the state public health system. Through a partnership agreement with the UAB School of Public Health, the department hosts several graduate student interns each year.

As part of the COVID-19 response, WFD coordinated a team of employees in the RSA Tower with a variety of work classifications who worked 7 days a week from mid-March through December answering toll-free telephone calls and e-mail questions from the public about COVID-19. The individuals on the team provided critical information and resources for Alabamians.

Nutrition and Physical Activity (NPA)

The NPA Division provided state leadership and represents the department on issues related to nutrition, physical activity, obesity, chronic disease, and wellness. The vision for the division is for Alabamians of all ages to embrace a culture of healthy choices as their normal way of life.

Adults and youth in Alabama continue to have high rates of obesity and chronic disease. The state consistently ranks as one of the most obese states in the nation. The most recent data from CDC reports a 36.1 percent obesity rate in Alabama. The following NPA initiatives address obesity and chronic disease in adults and youth:

- Recognized as the state's largest health and wellness program, Scale Back Alabama is entering its fifteenth year. Scale Back Alabama is an inclusive statewide weight loss campaign that encourages Alabamians to improve their health by eating better and moving more. The 2020 program drew in nearly 14,000 participants from around the state; however, due to COVID-19, the program was halted before

completion. Plans are being made to modify the program for 2021 to follow COVID-19 safety precautions while allowing the program to continue virtually.

- The State Obesity Task Force (OTF) is a network of organizations and individuals that work to reduce and prevent obesity in Alabama. Members of the task force continue working together to lead efforts to create a unified strategy to improve prevalence rates of obesity in Alabama through policy, system, and environmental changes that support healthy nutrition choices and regular physical activity.

- The Alabama Disability and Health Program works to improve the health and quality of life among people with disabilities through adaptation and implementation of evidence-based health promotion and prevention strategies. In Alabama, 33.2 percent of adults have some type of disability compared to 25.6 percent of adults in the United States. People with disabilities continue to experience significant health disparities and are more likely to be inactive and have obesity, among other health inequities. In 2020, the program continued valuable partnerships with the Alabama State Department of Education, the National Center on Health, Physical Activity, and Disability/Lakeshore Foundation, and others to develop and disseminate inclusive health promotion and prevention resources, guidebooks, and online trainings for worksites, schools, and after-school programs. The program also helped to develop and distribute COVID-19-related resources and information for people with disabilities.

- The Healthy Wellness Initiative is a collaboration between NPA and the Alabama Department of Education to provide wellness, nutrition, and physical activity training; technical assistance; and information to the 21st Century Community Center Learning Program and Dependent Care grantees. In 2020, multiple in-person trainings and presentations were postponed due to COVID-19; however, staff were able to conduct a training in Macon County for after-school providers from four schools. Virtual trainings and workshops were also held in the summer reaching multiple after-school programs around the state.

- The Alabama State Office of Minority Health (SOMH) works to increase the knowledge and awareness of existing health disparities among minority populations in an effort to expand and create health policies and strategies to eliminate such disparities. In 2020, SOMH continued working with multicultural partners in Hale, Marengo, Sumter, and Tuscaloosa counties to promote positive health behaviors and practices through improving the availability of healthy food and beverage options and health-related programs such as Scale Back Alabama and Cooking Matters. The office also worked within the same communities to increase access to physical activity opportunities and healthcare services through promotion of present services in the respective hot spot areas. In the second half of 2020, SOMH received funding through the Preventive Health and Health Services Block Grant to address food insecurity in Alabama by increasing awareness and improving access to adequate, nutritious foods through partnerships with organizations that provide food access resources.

- As an implementing agency for the Supplemental Nutrition Assistance Program (SNAP), the NPA Division provides nutrition education to individuals who are eligible for SNAP benefits. Education activities took place in schools, local health departments, and senior nutrition centers where nearly 500 individuals received direct education. An additional 29,818 individuals were reached indirectly with nutrition messages, resources, and materials. Trainings that promote and support school wellness policies were completed, reaching 7,848 students and school faculty statewide.

Cardiovascular Health

According to the Behavioral Risk Factor Surveillance System 2019 Data Report, 42.5 percent of Alabama adults surveyed said they have been told by their doctors they have high blood pressure or hypertension. The mortality rate from cardiovascular disease shows a higher discrepancy in Alabama, 291.9 people per 100,000 population compared to 219.4 per 100,000 in the U.S. as a whole. The U.S. prevalence of hypertension is 45 percent and 32 percent for high blood cholesterol levels. The Cardiovascular Program, funded by CDC, continued to work on six strategies over the year, despite COVID-19 slowing down progress on some of the strategies.

Program Accomplishments:

- Established 26 new Self-Monitoring Blood Pressure sites around the state, bringing the total number of sites to 56. All sites shut down for several months due to COVID-19.

- Collaborated with the University of Alabama-University Medical Center and the Mobile County Health Department who have developed a lifestyle modification program to treat hypertension and high blood cholesterol. Together, they have a total population of 115,912 patients and 19 clinics. These two programs created a patient app that allows access to education on these and other chronic diseases, and will track food, weight, exercise, blood pressure readings, and other specialized functions. The app provides the Dietary Approaches to Stop Hypertension (DASH) diet information and menus, as well as ordering groceries via a chain grocery. The app will also give patients information about referrals to specialists or community programs as needed.

- Interviewed healthcare professionals in many communities to determine current practices regarding hypertension and high blood cholesterol. Out of 50 provider interviews, over 487,000 patients were served and 6,000 referred to Blood Pressure Self-Monitoring. Forty-one of the 50 providers use a blood pressure algorithm to determine if the patient is hypertensive; 32 use quality measures, and 41 use team-based care procedures.

Diabetes

The Alabama Diabetes Program focuses on increasing community access to resources that assist with managing and preventing diabetes. Diabetes Self-Management Education and Support (DSMES) helps people with diabetes to implement and sustain behaviors that help manage the condition on an ongoing basis. The CDC Diabetes Prevention Program (DPP) lifestyle change program is designed to help those with prediabetes and

those at risk of developing Type 2 diabetes to prevent or delay the onset of Type 2 diabetes through healthy eating and physical activity. Alabama has 25 CDC-recognized DPP organizations and over 60 accredited/recognized DSMES sites.

Support to Samford University's McWhorter School of Pharmacy (MSOP) continued this year, allowing Samford to implement quality improvement activities within its DSMES training for pharmacists. MSOP expanded its training to include dietitians and began its cohort with a total of 25 participants. In addition, the training was adapted to an online format to overcome the challenge of social distancing during the COVID-19 pandemic. These changes helped to support accreditation of nine new DSMES practices.

The Alabama Diabetes Program awarded $90,000 in mini-grants to organizations to either implement DPP lifestyle change programs or help existing programs work towards achieving full recognition through CDC. These funded organizations contributed 3 new DPP sites, increasing the number of programs in Alabama from 22 to 25. The funding has also helped organizations to implement distance learning into their programs to maintain program delivery to participants during the COVID-19 pandemic.

Outreach efforts continued through District Outreach Coordinators (DOCs) in each of the ADPH governed public health districts. During the COVID-19 pandemic, DOCs shifted focus to aid their district and county health departments in response efforts. This included screening people entering health departments, assisting at drive-through testing clinics, answering telephone calls, and helping with investigations. DOCs also distributed chronic disease information while assisting in these efforts.

Pharmacy Division

The Pharmacy Division is responsible for the Prescription Drug Monitoring Program (PDMP), providing medication information and medication protocol support to county health departments, maintaining the Alabama Controlled Substances List, and assisting CEP in disasters. In addition, the division is involved in fighting the opioid crisis through education, collaboration, and prevention activities.

The division has participated in many aspects of mitigating the COVID-19 pandemic. As medications received emergency use authorization for the treatment of COVID-19 and were allocated to Alabama, division staff worked with other divisions within ADPH and other state agencies to distribute these medications to healthcare facilities. Staff also assisted pharmacies throughout Alabama in how to become COVID-19 testing sites and vaccination providers.

Many of the activities related to the opioid crisis were delayed due to the COVID-19 pandemic. Overdose Data to Action grant meetings and activities were cancelled or converted to virtual events when possible. Despite challenges, the Pharmacy Division staff collaborated with state agencies and community groups to provide education and prevention activities in local communities. PDMP staff are members of the Opioid Overdose and Addiction Council and three of its subcommittees: Rescue, Prescriber/Dispenser, and Data. Collaborating with the Alabama Department of Mental Health (ADMH), Pharmacy Division staff

distributed naloxone, a medication that reverses an opioid overdose, to first responders and people at risk for an overdose.

ADPH and ADMH released an anti-stigma campaign to bring awareness and exposure in an effort to end the stigmas of opioid use disorder, HIV, viral hepatitis, substance use disorder, and mental illness. While the initial campaign focused on the general public, the ongoing campaign will provide education to healthcare providers.

Improvements continue to be made to the PDMP database. Most significantly, the number of users accessing PDMP data through their electronic health record has increased. This feature saves the user time and improves workflow efficiency within the healthcare practice, thereby improving utilization of the database. Five virtual PDMP trainings were held, were well attended by healthcare professionals across the state, and focused on interpretation of risk scores, how to incorporate the PDMP database into a practice, and the importance of documentation. In addition, six training videos were developed to assist PDMP users in how to use certain features of the database.

Primary Care and Rural Health

The Office of Primary Care and Rural Health (OPCRH) administers programs to improve healthcare access and quality in rural and medically underserved communities. Currently, 63 of Alabama's 67 counties have areas designated as being medically underserved. These underserved areas have a high prevalence of healthcare issues, including chronic diseases such as diabetes, hypertension, heart disease, and other challenges such as a high rate of substance abuse. OPCRH employs a number of programs and works very closely with partners such as the Alabama Rural Health Association, the Alabama Hospital Association, the Alabama Primary Health Care Association, and departmental bureaus to address these health issues. Some of the major initiatives in OPCRH are recruitment and retention of healthcare professionals, and technical assistance to assist 40 small, rural hospitals and health providers in transitioning to a new value-based healthcare system.

OPCRH utilizes a national, web-based recruitment system called National Rural Recruitment and Retention Network to recruit into medically underserved areas. During FY2020, approximately 717 primary care practitioners were referred to rural hospitals and clinics in Alabama. Another recruitment program is the National Health Service Corps (NHSC), which has both scholarship and loan repayment components.

NHSC covers a wide array of health professionals, from physicians, dentists, and nurses to behavioral health professionals. These programs are supplemented by a J-1 visa waiver program, which enables placement of foreign trained physicians in return for 3 years of service in medically underserved areas. Currently, there are 62 healthcare providers delivering medical care to rural and medically underserved Alabamians under these programs. OPCRH also assists communities in establishing Centers for Medicare and Medicaid services-certified rural health clinics. During the past year, 19 new

rural health clinics were established, for a current total of 132. OPCRH collaborates with various entities to address workforce issues essential to improving the health of Alabama residents. One such initiative is the partnership with the UAB Huntsville medical campus to develop a rational service area plan designed to more accurately identify workforce shortage areas for federal designation. These areas determine eligibility for certain federal grants as well as eligibility for NHSC and J-1 visa waiver program. Alabama's 40 small, rural hospitals are also assisted under federal grants administered by OCPRH which target improvement of operational efficiency, quality, and hospital sustainability.

COVID-19 presented many financial challenges to Alabama's rural hospitals including heavy reductions in patient appointments and elective surgeries. COVID-19 also reduced the participation of new J-1 and NHSC physicians. In response to COVID-19, the Health Resources and Services Administration provided funding, distributed and administered by OPCRH and the Alabama Hospital Association, to provide relief and support to Alabama's small rural hospitals.

Wellness

Wellness screenings were halted for part of 2020 due to COVID-19, which greatly impacted the number of clients served. Additional protective measures also had to be instituted when screenings resumed, such as temperature checks, wearing masks, social distancing, and handwashing. Wellness staff were activated for COVID-19 response and assisted in packaging of test kits, staffing the COVID-19 phone bank and drive-through testing clinics, and conducting temperature checks for employees.

Public Education Employees' Health Insurance Plan (PEEHIP) Wellness Program

PEEHIP Wellness is a joint project of the department and PEEHIP. In FY2015, PEEHIP mandated that members be screened or pay more for their medical insurance. Members had the opportunity to get a screening without being penalized. During FY2020, department nurses performed 54,679 screenings at worksites, and healthcare providers conducted an additional 12,723 screenings. During this same time frame, 36,444 received an influenza vaccine.

State Employees Insurance Board (SEIB) Wellness Program

During FY2020, 13,538 state employees were screened by Wellness Program staff for SEIB. A total of 3,738 SEIB employees received an influenza vaccine.

Local Government Health Insurance Board (LGHIB) Wellness Program

During FY2020, 98 local employees were screened by Wellness Program staff for the LGHIB. A total of 2,491 LGHIB employees received an influenza vaccine. The Wellness Program has had a contractual agreement with LHIB since 2017.

Also during FY2020, the Wellness Entry Login Link System was developed and piloted which led to the reduction of paper and enhanced the immediate flow of data to SEIB and PEEHIP.

OFFICE OF PROGRAM INTEGRITY

The Office of Program Integrity is an independent appraisal arm of the department. The office serves the State Health Officer to provide assurances regarding the integrity of the department's financial systems, compliance with federal requirements, and compliance with applicable state laws and regulations. The office also serves as consultant for the programs, services, and functions of the department.

The primary mission of the office is to assist directors, managers, and administrators in effectively discharging their duties by reviewing various activities and functions within the department, presenting reports on deficiencies, and providing recommendations for corrective actions concerning those activities.

During 2020, the office continued its mission of objectively evaluating county health departments and central office units in the areas of financial and administrative activities and federal compliance.

Figure 54. Accomplishments by Audit Category, FY2020

Financial/Administrative Audits	
County Health Departments	4
Property Audits	4
Federal Program Audits	
County Health Departments	12
Private/Contract Agency	3
Special Reviews and Consulting	
SAFE (Security for Alabama Funds Enhancement) Program Compliance Monitoring	
Subrecipient Compliance and Monitoring	

Figure 53. Accomplishments by Audit Category, FY2020

Administrative Audits **4**
Federal Audits **12**
Total Counties with Audits Conducted: 16

OFFICE OF RADIATION CONTROL

The mission of the Office of Radiation Control is to protect the public and occupationally exposed workers from unnecessary exposure to ionizing radiation. This is accomplished by registering, licensing, and inspecting the day-to-day use of ionizing radiation in the state; working with registrants and licensees to assist them in developing and implementing programs to maintain radiation doses as low as reasonably achievable; performing routine monitoring of radioactivity in the environment; responding to incidents involving radioactive material; and conducting formal public and professional educational programs.

Notable Achievements for FY2020

COVID-19 Activities: To support the response to the COVID-19 pandemic, staff from the Office of Radiation Control were assigned responsibilities beyond their normal day-to-day activities. The office was represented within the Incident Command System (ICS), including staff having duties as operations section chief and planning section chief within the ICS structure. Also, numerous staff members volunteered to assemble test kits, deliver supplies, and filled in where needed to support the overall department response to the pandemic. Many of the functions of the office, including routine inspections and training, were put on hold during the initial onset of the pandemic to accommodate the orders of the Governor and State Health Officer.

Relocation to Prattville: In 2020, the office moved to its new location at the Administrative Annex in Prattville. In preparation for this move, the office implemented a program to reduce its overall office footprint by scanning documents in digital format. This included scanning approximately 700,000 pages before the move in June 2020. Documents scanned included radioactive material license documents, particle accelerator registration documents, medical and non-medical X-ray machine registration documents, general license registration documents, and training documents.

Radioactive Materials Program: The radioactive materials program operates under an agreement with the U.S. Nuclear Regulatory Commission (NRC), and Alabama is one of 39 Agreement States. Radioactive material can be possessed and used under a general license or specific license by entities within Alabama. There are 193 general licensees and 339 specific licensees using radioactive material in Alabama. During this period, the office conducted 120 inspections of radioactive material licensees. Additionally, the office issued radioactive material licenses to seven new applicants and processed 339 amendment requests. As an Agreement State, the program is subject to periodic reviews under NRC's Integrated Materials Performance Evaluation Program (IMPEP). The next scheduled IMPEP review will be in 2023.

Medical X-Ray: The office conducted 1,067 routine inspections of X-ray and particle accelerator facilities during the period. This included 132 inspections of mammography facilities under the Mammography Quality Standards Act, 17 inspections of particle accelerator facilities, and 37 inspections of non-medical X-ray facilities. Additionally, 901 shielding plans for X-ray facilities were evaluated by staff and approved during this period.

Emergency Planning: Radiation safety and emergency response training was provided to 597 individuals during this period. Those receiving training included individuals from ADPH, Alabama Emergency Management Agency (AEMA), county emergency management agencies, hospitals, emergency medical services, police, fire, and sheriff's departments, as well as volunteer members of the public around Alabama's two nuclear power plants. Because of the COVID-19 pandemic, the annual training exercises at the two nuclear power plants in Alabama were postponed until 2021.

Environmental: The office continues to collect ambient, air, water, soil, and vegetation samples from areas surrounding certain radioactive material licensees and the two nuclear power plants located in Alabama to confirm that any releases of radioactive material are within regulatory limits.

Waste Isolation Pilot Plant (WIPP): The WIPP facility, located near Carlsbad, New Mexico, is the only repository for the disposal of nuclear waste known as transuranic waste. This transuranic waste is shipped from facilities throughout the United States and transported on predetermined routes and monitored via GPS tracking. The routes include Interstates 59 and 20, traveling through 10 corridor counties in Alabama. Through coordination with AEMA, the office equips and trains first responders in the WIPP corridor counties to respond in case of an accident or incident involving a WIPP shipment.

Radon: Through continued outreach opportunities and through the radon website, the office encourages citizens in Alabama to test their homes for radon. The office responds to request for information received through phone calls and e-mails. During this period, the office responded to 357 e-mails and phone calls, and 481 radon test kits were given away by the office.

COUNTY HEALTH DEPARTMENT SERVICES

Public Health services in Alabama are primarily delivered through county health departments. Larger counties and counties with specific needs have more than one county health department location. A wide variety of services is provided at county health departments, as well as valuable information.

Typical services and information include the following:

- Alabama Breast and Cervical Cancer Early Detection Program
- Bio Monitoring Services
- Birth, Death, Marriage, and Divorce Certificates
- Cancer Detection
- Child Health
- Children's Health Insurance Program
- Dental Services/Health Education and Community Fluoridation Programs
- Diabetes
- Disease Surveillance and Outbreak Investigations
- Family Planning
- Food and Lodging Protection
- HIV Prevention and Care
- Home Care Services
- Immunization
- Insect and Animal Nuisances That Can Transmit Disease to Humans
- Laboratory
- Maternity
- Nursing Services
- Nutrition Services
- Onsite Sewage Disposal Systems
- Sexually Transmitted Diseases
- Solid Waste
- Telehealth
- Tuberculosis
- Water Supply in Individual Residential Wells
- Women, Infants, and Children

PUBLIC HEALTH DISTRICTS MAP

EAST CENTRAL DISTRICT
Richard Burleson, District Administrator
3060 Mobile Highway
Montgomery, AL 36108
(334) 293-6400
Tim Hatch, Assistant District Administrator
812 Hospital Rd., Tuskegee, AL 36083
(334) 727-1800

JEFFERSON COUNTY
Mark E. Wilson, M.D., County Health Officer
David Hicks, D.O., M.P.H., Deputy Health Officer
1400 Sixth Ave. S.
Birmingham, AL 35233
(205) 933-9110

MOBILE COUNTY
Bernard H. Eichold, II, M.D.
County Health Officer
251 N. Bayou St.
Mobile, AL 36603
(251) 690-8827

NORTHEASTERN DISTRICT
Karen Landers, M.D., District Medical Officer
Mary Gomillion, District Administrator
Mark Johnson, Assistant District Administrator
709 E. Broad St.
Gadsden, AL 35903
(256) 547-6311

NORTHERN DISTRICT
Karen Landers, M.D., District Medical Officer
1000 S. Jackson Hwy.
Sheffield, AL 35660
(256) 383-1231
Judy Smith, District Administrator
Michael Glenn, Assistant District Administrator
3821 Highway 31 S.
Decatur, AL 35603
(256) 340-2113

SOUTHEASTERN DISTRICT
Corey Kirkland, District Administrator
1781 E. Cottonwood Rd.
Dothan, AL 36301
(334) 792-9070
Kyle Odom, Assistant District Administrator
2841 Neal Metcalf Rd.
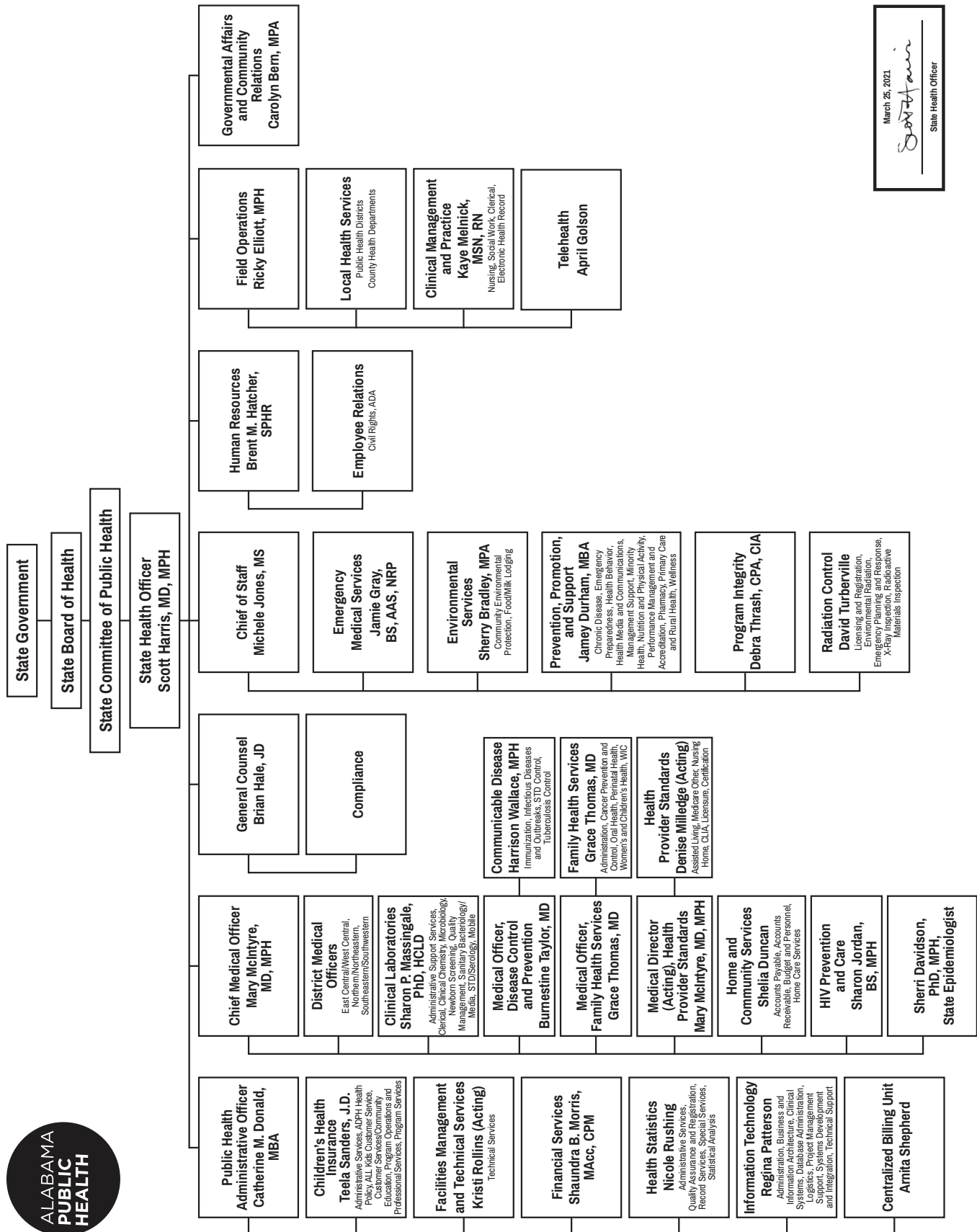Enterprise, AL 36330
(334) 347-9574

SOUTHWESTERN DISTRICT
Chad Kent, District Administrator
1115 Azalea Place
Brewton, AL 36426
(251) 947-1645
Suzanne Terrell, Assistant District Administrator
303 Industrial Drive
Linden, AL 36748
(334) 295-1000

WEST CENTRAL DISTRICT
Stacey Adams, District Administrator
2350 Hargrove Rd., E.
Tuscaloosa, AL 35405
(205) 554-4500

ADPH ORGANIZATIONAL CHART

ALABAMA PUBLIC HEALTH

March 25, 2021

State Health Officer

State Government

State Board of Health

State Committee of Public Health

State Health Officer
Scott Harris, MD, MPH

Governmental Affairs and Community Relations
Carolyn Bern, MPA

Field Operations
Ricky Elliott, MPH

Local Health Services
Public Health Districts
County Health Departments

Clinical Management and Practice
Kaye Melnick, MSN, RN
Nursing, Social Work, Clerical, Electronic Health Record

Telehealth
April Golson

Human Resources
Brent M. Hatcher, SPHR

Employee Relations
Civil Rights, ADA

Chief of Staff
Michele Jones, MS

Emergency Medical Services
Jamie Gray, BS, AAS, NRP

Environmental Services
Sherry Bradley, MPA
Community Environmental Protection, Food/Milk Lodging

Prevention, Promotion, and Support
Jamey Durham, MBA
Chronic Disease, Emergency Preparedness, Health Behavior, Health Media and Communications, Management Support, Minority Health, Nutrition and Physical Activity, Performance Management and Accreditation, Pharmacy, Primary Care and Rural Health, Wellness

Program Integrity
Debra Thrash, CPA, CIA

Radiation Control
David Turberville
Licensing and Registration, Environmental Radiation, Emergency Planning and Response, X-Ray Inspection, Radioactive Materials Inspection

General Counsel
Brian Hale, JD

Compliance

Communicable Disease
Harrison Wallace, MPH
Immunization, Infectious Diseases and Outbreaks, STD Control, Tuberculosis Control

Family Health Services
Grace Thomas, MD
Administration, Cancer Prevention and Control, Oral Health, Perinatal Health, Women's and Children's Health, WIC

Health Provider Standards
Denise Milledge (Acting)
Assisted Living, Medicare Other, Nursing Home, CLIA, Licensure, Certification

Chief Medical Officer
Mary McIntyre, MD, MPH

District Medical Officers
East Central/West Central, Northern/Northeastern, Southeastern/Southwestern

Clinical Laboratories
Sharon P. Massingale, PhD, HCLD
Administrative Support Services, Clerical, Clinical Chemistry, Microbiology, Newborn Screening, Quality Management, Sanitary Bacteriology/Media, STD/Serology, Mobile

Medical Officer, Disease Control and Prevention
Burnestine Taylor, MD

Medical Officer, Family Health Services
Grace Thomas, MD

Medical Director (Acting), Health Provider Standards
Mary McIntyre, MD, MPH

Home and Community Services
Shelia Duncan
Accounts Payable, Accounts Receivable, Budget and Personnel, Home Care Services

HIV Prevention and Care
Sharon Jordan, BS, MPH

Sherri Davidson, PhD, MPH, State Epidemiologist

Public Health Administrative Officer
Catherine M. Donald, MBA

Children's Health Insurance
Teela Sanders, J.D.
Administrative Services, ADPH Health Policy, ALL Kids Customer Service, Customer Services/Community Education, Program Operations and Professional Services, Program Services

Facilities Management and Technical Services
Kristi Rollins (Acting)
Technical Services

Financial Services
Shaundra B. Morris, MAcc, CPM

Health Statistics
Nicole Rushing
Administrative Services, Quality Assurance and Registration, Record Services, Special Services, Statistical Analysis

Information Technology
Regina Patterson
Administration, Business and Information Architecture, Clinical Systems, Database Administration, Logistics, Project Management Support, Systems Development and Integration, Technical Support

Centralized Billing Unit
Anita Shepherd