

### COMMUNITY HEALTH NEEDS ASSESSMENT & ACTION PLAN

2020-2021

# HISTORY



- South Central Regional Medical Center in Jones County, MS, was one of the first hospitals in Mississippi to conduct a Community Health Needs Assessment in 1998. As a public hospital, South Central has strived to improve community health for years by implementing numerous programs and services including a weekly health education television program, health seminars, health conferences, free health fairs for the community and area industries, health education through submission of articles to area newspapers, promotion of health resources on South Central Vision, the medical center's flat screen television network, and numerous other activities.
- During COVID-19, South Central took a lead in providing community education and outreach. The hospital offered COVID-19 community vaccine clinics; sent clinical staff out to area industries and schools to provide the vaccine; secured thousands of units of PPE through foundations and general donations in the community; and also opened a Monoclonal Antibody Treatment Center. Information is provided at the end of this presentation about Mississippi hospitals COVID journey.

# PURPOSE

South Central Regional Medical Center undertook assessment of the health needs of Jones County, MS, in support of SCRMC's mission to serve the health needs of its community and to meet statutory requirements:

- 1. Conduct a Community Health Needs Assessment (CHNA) with input from persons representing the broad interests of the community served.
- 2. Adopt an implementation strategy to address the needs identified in the CHNA.
- Make the assessment and implementation strategy readily available to the community via the hospital's web site, as needed to inform the public.



### CHNA Content Requirements

- Description of the community served and how that was determined.
- Description of the process and methods used to conduct the CHNA.
- Description of information gaps that may impact ability to assess needs.
- Identify of any collaborating partners.
- Identify and qualifications of any third party assisting with the CHNA.
- Description of how input from the community was gathered and used.
- Prioritized description of the health needs identified in CHNA.
- Description of existing health care facilities and services within the community available to meet the needs identified.



### Primary Service Area

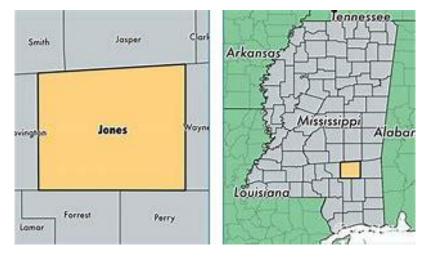
The reason for selecting Jones County to conduct this study is due to Jones County being the primary service area for South Central Regional Medical Center.

#### Processes and methods used to conduct CHNA:

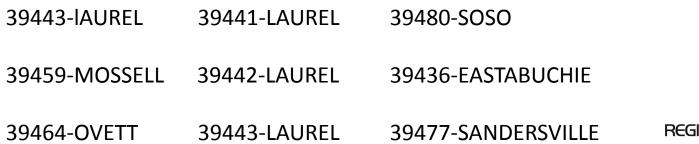
Statistics from the Mississippi State Department of Health Geographic information from ESRI. Input through a Public Opinion Survey. Mississippi Cancer Registry Centers for Disease Control



#### Defining the community served. Generally defined by a geographic area (county, group of zip codes, etc.) JONES COUNTY, MISSISSIPPI



#### ZIP CODES OF JONES COUNTY MISSISSIPPI





# Jones County Mississippi Population 2021

YEAR	POPULATION	GROWTH	<b>GROWTH RATE</b>
2021	67,902	-98	-0.14%
2020	68,000	-98	-0.14%
2019	68,098	-98	-0.14%
2018	68,196	-168	-0.25%
2017	68,364	-109	-0.16%
2016	68,473	-156	-0.23%
2015	68,629	233	34%
2014	68,396	-558	-0.81%
2013	68,954	535	0.78%
2012	68,419	492	0.72%
2011	67,927	118	0.17%



# POPULATION BY AGE - JONES COUNTY MS. 2010, 2021, 2026

	CENSUS 2010 %		CENSU	S 2021 %	CENSUS 2026 %	
AGE						
<u>Age 0-4</u>	5,064	7.47%	4,633	6.70%	4,513	6.60%
<u>Age 5-9</u>	4,847	7.15%	4,811	7.00%	4,650	6.80%
<u>10-14</u>	4,708	6.95%	4,69	6.80%	4,822	7.10%
<u>15-19</u>	4,995	7.37%	4,420	6.40%	4,802	7.00%
<u>20-24</u>	4,434	6.54%	3,744	5.50%	3,699	5.40%
<u>25-34</u>	8,484	12.52%	9,108	12.50%	9,139	13.40%
<u>35-44</u>	8,171	12.06%	8,606	11.50%	7,879	11.60%
<u>45-54</u>	9,265	13.67%	7,873	12.50%	7,876	11.50%
<u>55-64</u>	8,045	11.87%	7,235	10.50%	7,595	11.20%
<u>65-74</u>	5,319	5.01%	3,611	5.30%	4,355	6.40%
<u>85+</u>	1,013	1.53%	1,318	1.90%	1,384	2.00%



#### Jones County Health Ranking Comparison - 2021

Premature Death – There is a 44.9% difference rate between Jones County and US
Morbidity Measures – Jones County rates are consistently higher than US rates

Health Outcomes	Jones County	Mississippi	United States
<b>Premature Death</b> *Years of potential life lost before age 75 per 100,000 population ( age adjusted).	10,900	<b>10,400</b> (county range: 6,800 – 17,800)	6,900



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#### Jones County Mississippi Health Rankings 2021

\* PCP & Mental health provider ratios reflect underserved market

Health Behaviors	Jones County	Error Margin	Top U.S. Performers	Mississippi
Adult Smoking	24%	21-27%	16%	21%
Adult Obesity	39%	35 – 45%	26%	39%
Physical Inactivity	37%	32 – 41%	19%	30%
Excessive Drinking	14%	14 – 15%	15%	15%
Alcohol-impaired Driving Deaths	4%	1 – 9%	11%	20%
Teen Births	43	40 - 46	12	34
Clinical Care				
Uninsured	16%	14 – 18%	6%	14%
Primary care physicians	2,210:1		1,030:1	1,890:1
Mental health providers	1,060:1		270:1	590:1
Preventable hospital stays	6,889		2,565	5,702
Mammography screening	40%		51%	39%



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#### Jones County

Cancer Mortality Rates in Mississippi – All Sites, 2017 – 2018 \* Mississippi Rate 181.21 / per 100,000

Year	2017	2018	2017 - 2018	
Population at Risk	68312	68461	136773	
Total Deaths	135	119	254	
Crude Rate	197.62	173.82	185.71	
Age-Adjusted Rate	156.95	137.77	147.34	
95% Confidence Interval				
Lower	131.03	113.65	129.39	
Upper	186.78	165.79	167.21	
Statewide Age-Adjusted Rate	182.91	179.57	181.21	
Statewide 95% Confidence Interval				
Lower	178.41	175.15	178.06	
Upper	187.49	184.07	184.41	



• Age-Adjusted Cancer Mortality Rates by County in Mississippi, All Sites, 2017 - 2018. Based on data released Mar 2021. Cancer-Rates.info. Accessed on Sep 16, 2021. Mississippi Cancer Registry. <a href="http://cancer-rates.info/ms/">http://cancer-rates.info/ms/</a>>

#### Death Rate Comparison Report for Jones County

All Cancer Sites 2015 – 2019 All Races (includes Hispanic), Both Sexes, Ages 50 +

State, Nation, County	Met Healthy People Objective of ****?	Age-Adjusted Death Rate Deaths per 100,000	CI Rank	Average Annual Count	Recent Trend
Mississippi	***	613.5	N/A	6,185	falling
United States	****	512.0	N/A	568,048	falling
Jones County	***	541.6	69	132	falling

\*\*\*\* No Healthy People 2020 Objective for this cancer. Healthy People 2020 Objectives provided by the Centers for Disease Control and Prevention

Incidence Rates (cases per 100,000 per year) are age-adjusted. Rates are for invasive cancer only. Source: National Cancer Institute State Cancer Profiles, State Cancer Registry,

CDC National Program of Cancer Registry



#### Jones County Mortality Statistics Comparison - 2017-2019

\*Crude Rate Per 100,000

CAUSE OF DEATH	2017 Jones Co.	2017 Mississippi	2017 US	2018 Jones Co.	2018 Mississippi	2018 US	2019 Jones Co.	2019 Mississippi	2019 US	Jones Co 3 Yr Avg	MS 3 Yr Avg	US 3 Yr Avg	Jones Co % Diff w/US (3 Yr Avg)
Heart Diseases	300.3	266.2	198.8	274.6	259.8	200.3	276.1	268.7	200.8	283.7	264.9	200	34.6%
Cancer	198.7	218.7	183.9	173.8	218.0	183.2	218.8	221.3	182.7	197.1	219.3	183.3	7.2%
Cerebrovascular Disease	50.1	\$7.7	44.9	67.2	60.4	45.2	57.3	62.2	45.7	58.2	60.1	45.3	24.9
Hypertension/Hypertensive Renal Disease	36.8	18.5	10.8	20.4	18.5	11.0	19.1	16.3	11.1	25.4	17.8	11.0	79.1%
Emphysema and Other Chronic Lower Respiratory Diseases	55.9	68.3	49.2	64.3	71.5	48.7	73.4	69.8	47.8	64.5	69.9	48.5	28.3%
Diabetes Mellitus	42.7	39.0	25.7	33.6	36.0	26.0	36.7	38.9	26.7	37.7	38	26.1	36.4%
HIV Disease	unreliable	3.8		unreliable	4.2		unreliable	2.6			3.5		
Accidents	66.2	58.2	52.2	78.9	56.7	51.1	54.3	63.6	52.7	66.4	59.5	52.0	24.3%
OTHER LEADING CAUSES													
Alzheimer's Disease	61.8	54.5	37.3	73.0	51.8	37.3	57.3	55.8	37.	64.0	54.0	37.2	53.0%
Influenza & Pneumonia	44.2	26.2	17.1	67.2	30.5	18.1	48.5	26.5	15.2	53.3	27.7	16.8	104.1%
Nephritis, Nephrotic Syndrome, & Nephrosis	29.4		15.5	30.7		15.7	29.4		15.7	29.8		15.6	62.5%
Septicemia	32,4	19.5	12.6	36.5	16.7	12.4	20.6	13.7	11.7	29.8	16.6	12.2	83.8%
Suicide	16.2	14.9	14.5	17.5	14.1	14.1	16.2	14.6	14.5	16.6	14.5	14.4	14.2%
Parkinson's Disease		9.3	9.8		10.0	10.3	unreliable	11.2	10.8		23.0	10.3	

Citation: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, released in 2020. Data are from the Multiple Cause of Death Files, 1999-2019, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html on Sep 15, 2021 12:51:05 Additional sources: CDC/NCHS, National Vital Statistics System, Mortality 2017

#### Centers for Disease Control & Prevention 2021

MS Leading Causes of Death, 2017	Deaths	Rate***	State Rank*	U.S. Rate**		
1. <u>Heart Disease</u>	7,944	231.6	1st	165.0		
2. <u>Cancer</u>	6,526	183.1	2nd	152.5		
<ol> <li><u>Chronic Lower</u></li> <li><u>Respiratory Disease</u></li> </ol>	2,037	58.3	3rd	40.9		
4. <u>Accidents</u>	1,738	56.3	12th	49.4		
5. <u>Stroke</u>	1,723	51.1	2nd	37.6		
6. <u>Alzheimer's</u> <u>disease</u>	1,626	49.5	1st	31.0		
7. <u>Diabetes</u>	1,164	33.3	2nd	21.5		
8. <u>Flu/Pneumonia</u>	782	23.0	2nd	14.3		
9. <u>Kidney Disease</u>	741	21.7	1st	13.0		
10. <u>Septicemia</u>	582	16.9	2nd	10.6		
MS Leading Causes of Death, 2017						



### Top 10 Causes of Mortality in Jones County, MS

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	Jones Cty.	Mississippi	US
• 1. Heart Disease	276.1	268.7	200.8
• 2. Cancer	218.8	221.3	200.8
<ul> <li>3. Chronic Lung Disease &amp; Respiratory Disease</li> </ul>	73.4	69.8	47.8
<ul> <li>4. Cerebrovascular Disease</li> </ul>	57.3	66.2	45.7
<ul> <li>5. Alzheimer's Disease</li> </ul>	57.3	55.8	37.0
6. Accidents	54.3	63.6	52.7
<ul> <li>7. Influenza and Pneumonia</li> </ul>	48.5	26.5	15.2
<ul> <li>8. Diabetes/Mellititus</li> </ul>	36.7	38.9	26.7
<ul> <li>9. Nephritis, Nephrotic Syndrome</li> </ul>	29.4	No Data	18.7
<ul> <li>10. Hypertension/Renal Disease</li> </ul>	19.1	16.3	11.1



### Community Opinion Survey

The top responses in the Community Opinion Survey in regard to the most prevalent health problems in Jones County include:

- 1. Heart Disease
- 2. Diabetes
- 3. Cancer
- 4. Mental Health Issues
- 5. Obesity/Overweight
- 5. COVID (tie)



### Community Opinion Survey Results

The top responses in the Community Opinion Survey in regard to the most prevalent unhealthy behaviors in Jones County include:

- 1. Poor eating habits
- 2. Lack of physical activity (tie)
- 2. Alcohol and drug abuse (tie)
- 3. Lack of routine physician check-ups
- 4. Smoking/tobacco use (tie)
- 4. Violent behavior (tie)
- 5. Not getting immunizations



### Community Opinion Survey Results

The top responses in the Community Opinion Survey in regard to the most prevalent community issues that impact health in Jones County include:

- 1. Insufficient access to healthy food choices.
- 2. Lack of healthy family activities
- 3. Lack of adequate health insurance (tie)
- 3. Child abuse
- 4. Lack of positive teen activities.
- 5. Low income/poverty
- 5. Lack of prevention/education (tie)



# PUBLIC OPINION SURVEY Health Problems

#### Cancer

**Heart Disease** 

#### **Mental Health Issues**

Alcohol/drug use XXX (3)

Violent Behavior XX (2)

Lung disease (emphysema, etc.) XX (2)

Asthma XX (2)

Reckless/drunk driving XX (2)

End of Life Care XXXX (4)

Stroke XX (2)

Aging related issues (arthritis, hearing, vision) XX (2)

Infectious/contagious (pneumonia, flu) XXXXXXX (7)

Smoking/tobacco use X (1)

Teenage pregnancy X (1)

#### 

(Note: Information in the back of this document Includes the impact COVID 19 had on the State of Mississippi.



### PUBLIC OPINION SURVEY

#### Unhealthy Behaviors

#### 

Participating in unsafe sex XXX (3)

\*\*Reckless/drunk driving XXXX (4)

\*COVID

\*\*Due to cell phone use.

Violent Behavior XXXXXXXXX (9) 4<sup>th</sup> (tie)

Not getting prenatal visits X (1)

\*Not getting immunizations XXXXXX (6) 5th

Smoking/tobacco use XXXXXXXXX (9) 4<sup>th</sup> (tie)

Lack of dental preventative check-ups XXXX (4)

Not using child safety seats X (1)





### PUBLIC OPINION SURVEY

Demographic profile of participants.

AGE: 18-35 XXXXXXX (8) 36-55 XXXXXXXXXXXXXXXXXXXXXXXX (22) 56-80 XXXXXXXXXXXXXXXXXXXXXXXX (20) 81-100 X (1)

#### **GENDER:**

#### ETHNICITY:

Total Responding: 51

Total Surveys: 200 Response Rate: 25%

On average, external surveys have between a 10%-13% response rate.

Note: Not all survey participants selected an item in each category. Some did not complete the demographic profile section.

### Demographic Differences in Jones County Deaths Caused by Heart Disease

- Heart disease is the leading cause of death in the United States, resulting in about one in every four deaths. Every minute, someone in the United States dies from a heart disease-related event. The most common form of heart disease in the United States is coronary artery disease which limits blood-flow to the heart. A complete blockage of blood results in a heart attack. This report examines the data on heart disease deaths in Jones County, Mississippi.
- Certain populations are more at risk of contracting heart disease. This includes people with abnormal heartbeats or heart defects, high body mass indexes, or diabetes. In addition, negative lifestyle choices can increase risk of heart disease including poor diet, smoking, and excessive drinking.
- While heart disease remains the leading cause of death in the U.S., since 1999 the rate of deaths by heart disease has decreased. Factors related to this decline may include a concurrent decline in tobacco use, along with major advances in medical technology and treatment. Despite the decline, in recent years the trend has flattened.



### Heart Disease Mortality Trends in Jones County, Mississippi

- Certain populations are more at risk of contracting heart disease. This includes people with abnormal heartbeats or heart defects, high body mass indexes, or diabetes. In addition, negative lifestyle choices can increase risk of heart disease including poor diet, smoking, and excessive drinking.
- While heart disease remains the leading cause of death in the U.S., since 1999 the rate of deaths by heart disease has decreased. Factors related to this decline may include a concurrent decline in tobacco use, along with major advances in medical technology and treatment. Despite the decline, in recent years the trend has flattened.

### Demographic Differences in Jones County Heart Disease Deaths

#### By Sex in Jones County, MS

While heart disease is the leading cause of death for both men and women in the United States, Men statistically have a higher mortality rate from heart disease than women.

#### By Race in Jones County, MS

Heart disease is the leading cause of death for whites and African Americans. For American Indians/Alaska Natives and Asians/Pacific Islanders, heart disease is second only to cancer.

#### By Age in Jones County, MS

Deaths from heart disease disproportionately affect the elderly. For young Americans, death from heart disease, while tragic, is relatively rare. In many localities, the heart disease death rate among younger people is rare enough that the CDC only reports it as unavailable or "unreliable."

### More information on Heart Disease

The American Heart Association came out with a list of 7 heart health factors to indicate ideal cardiovascular health. The include:

- A blood pressure below 120/80 mm Hg
- 60+ minutes/day of vigorous physical activity for children, 75+ minutes for adults
- Healthy levels of cholesterol below 170 mg/dl
- Healthy weight
- Quitting or never starting smoking
- Blood sugar below 100 mg/dl



### Cancer Mortality Trends in Jones County, Mississippi

- Nationally, the mortality rate for cancer has steadily declined since the 1990's. The American Cancer Society attributes this drop to a concurrent decline in smoking rates, as well as better methods for early detection and treatment of cancer.
- Cancer mortality has declined even as the incidence rate—that is, the rate of new cancer cases among the population—has remained relatively stable. Over the past decade of available data, cancer incidence for men decreased by about 2 percent and remained roughly unchanged for women.



### Demographic Differences in Jones County Cancer Deaths

#### By Sex

Nationally, men are more likely to die from cancer than women. In 2017, about 181 men per 100,000 died from cancer; for women, the rate was roughly 131 deaths per 100,000.

Both men and women have experienced major declines in cancer death rates. In 1999, 252 men per 100,000 died of cancer; for women, the rate in 1999 was 167 per 100,000. The disparity in cancer mortality between men and women is known to the medical community and may reflect a complex set of factors, including differences in behavioral risk factors, access to medical care, and biological differences.



### Demographic Differences in Jones County Cancer Deaths

#### **By Race in Jones County**

Cancer affects certain groups of people at different rates. Nationally, African Americans have the highest rate of cancer mortality, and Asians/Pacific Islanders have the lowest.

Just as many factors can contribute to cancer risk, disparities in cancer mortality arise from a complex set of factors as well. For example, members of minority groups are more likely to be poor. According to the National Cancer Institute, people in poverty, in turn, often lack adequate medical care and are more likely to be exposed to environmental risk factors, such as air pollution.

These disparities do not manifest the same way across the United States, however. **Risk factors unique to** Jones County may play a vital role in both explaining local disparities in cancer deaths and in preventing those deaths.



#### Current Local Resources

Obesity tends to be a major factor in significant health issues in Jones County.

Health Issue	Local Resources
Heart Disease	SCRMC Diabetes Education
	Primary Care Physicians
	South Central Diabetes Center
	Jones County Health Department
	South Central Wellness Center
	Other Wellness Facilities in the Community
	South Central Health Care Foundation
	Community Foundations



# Significant Health Issues

#### Significant Health Issues

Heart Disease Cancer Chronic Lung Disease Cerebrovascular Disease Alzheimer's Disease Accidents Influenza/Pneumonia Diabetes Nephritis Hypertension

#### **Significant Contributors**

Obesity Obesity/Physical Inactivity Smoking Obesity/Smoking Age/Genetics Vehicle/Motorcycle/ATV Lack of vaccines Overweight Autoimmune disorders Heart disease



# Action Plans to Improve Community Health

Issue 1:

**Heart Disease** 

Contributor: Obesity

**Plan of Action:** 

Develop a HealthBreak feature to educate the public about the relationship between obesity and heart disease.

Provide incentives for those who are obese to join our wellness center.

Evaluate offering a surgical weight loss program.

Conduct a community health fair (post COVID) with a primary emphasis on heart disease. Invite the Jones County Health Department to participate as well as other agencies that can educate the public about the issues related to heart disease and obesity.

Develop articles for local publications to educate the public about the impact obesity has on heart disease.



# HEART DISEASE IS KEY FOCUS.

<u>The results generated in the Communion Opinion Survey in regard to health</u> <u>problems in Jones County fall in line with Jones County's statistics in regard</u> <u>to patient mortality:</u>

- Heart disease was identified as the top health risk in Jones County by survey participants, while the mortality statistics show Heart Disease being number 1.
- Diabetes was identified as the second health risk in Jones County by survey participants, while the statistics show Diabetes being number 8. However, there are close correlations between Heart Disease and diabetes. Other comments in the survey which have links to heart disease and diabetes include obesity/overweight, lack of physical activity, lack of insufficient food choices, lack of adequate healthy family activities, and lack of prevention and education.





# Action Plans to Improve Community Health

Issue 2:

Cancer

**Contributor:** Poor nutrition, tobacco use, sun exposure, lack of screenings, lack of regular health check-ups

#### **Plan of Action:**

Feature the following physicians on HealthBreak addressing the key contributors to cancer:

Breast Cancer-Keith Winstead, D.O., OBGYN

Lung Cancer- Sandeep Singh, MD, Cancer Specialist

Prostate Cancer- Jens Graversen, MD, Urologist



Skin Cancer: Ashlyn Bennett, FNP, South Central Dermatology

Conduct cancer screenings at annual Community Health Fair (post COVID) including prostate cancer and skin cancer.

Provide community education at the Community Health Fair about risk factors for cancer.

Set up speaking engagements for our cancer specialist to talk about key factors that cause cancer.

Offer stop smoking classes. Offer them first to SCRMC employees and then to the general community.

# Action Plans to Improve Community Health

It is important to note that responses to the Public Opinion Survey indicated mental health was a major health issue.

Issue 3:

**Mental Health** 

**Contributor:** Lack of resources.

**Plan of Action:** 

Continue to recruit psychiatrists, NPs or PAs to improve access to mental health services.

Consider offering tele-health services for the clinic.

Expand behavioral health therapy services.

Community education is also key in regard to mental health.



### Issues Not Addressed and Why

Due to limited resources and to be effective, we are targeting 3 key areas over the next 3 years. The areas we will be targeting have been identified in this plan and include:

**Heart Disease** 

Cancer

**Mental Health** 



# Mississippi COVID-19 Statistics

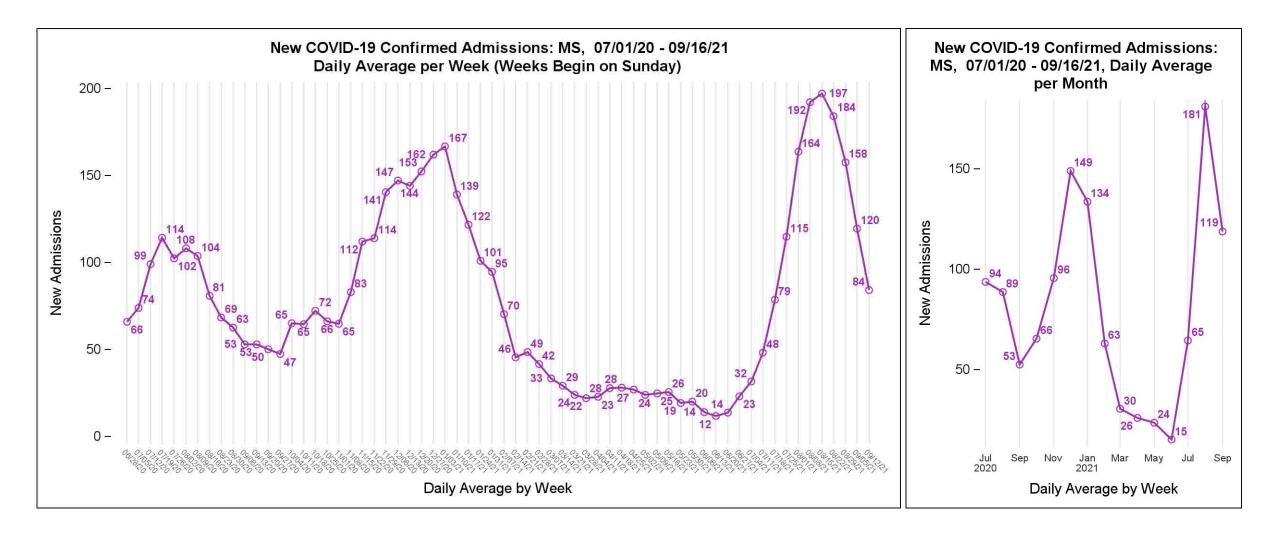
The final slides in this presentation provide a glimpse of the journey Mississippi Hospitals have experienced during the COVID-19 journey.

- New admissions
- ICU patients
- Patients on ventilators
- ICU bed use
- Medical surgical COVID and non-COVID patients



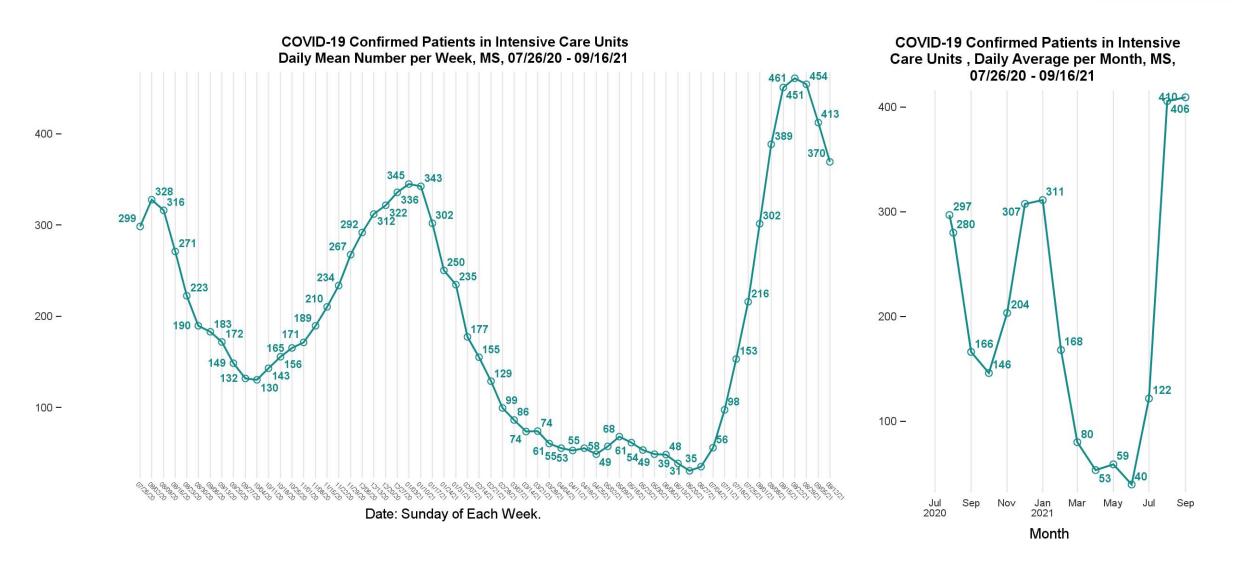
### New Admissions





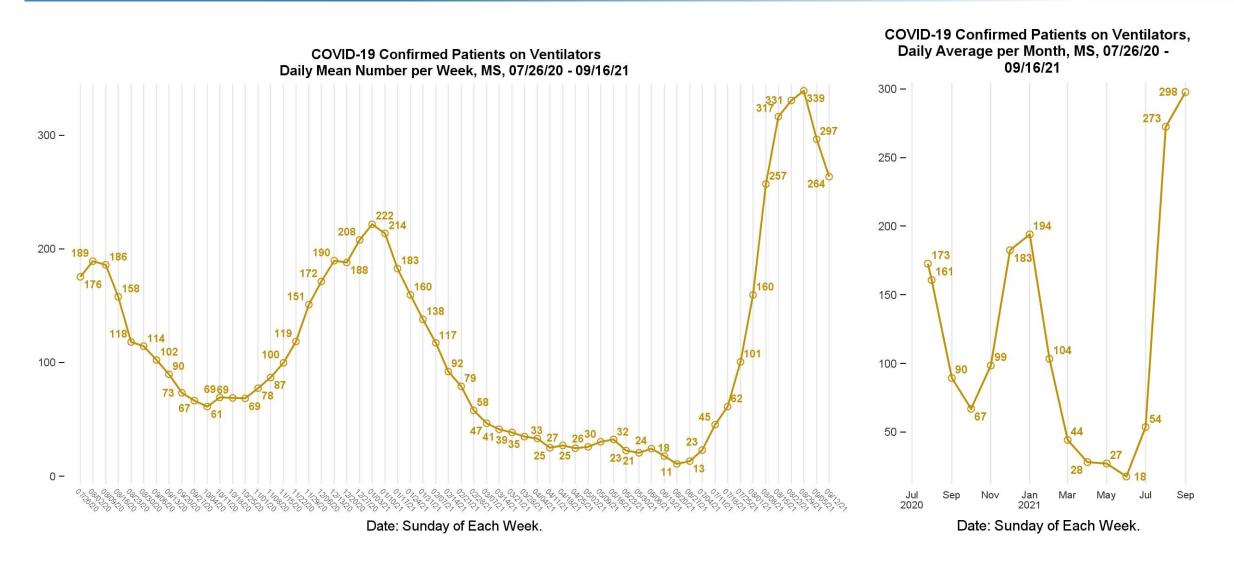
### **ICU** Patients





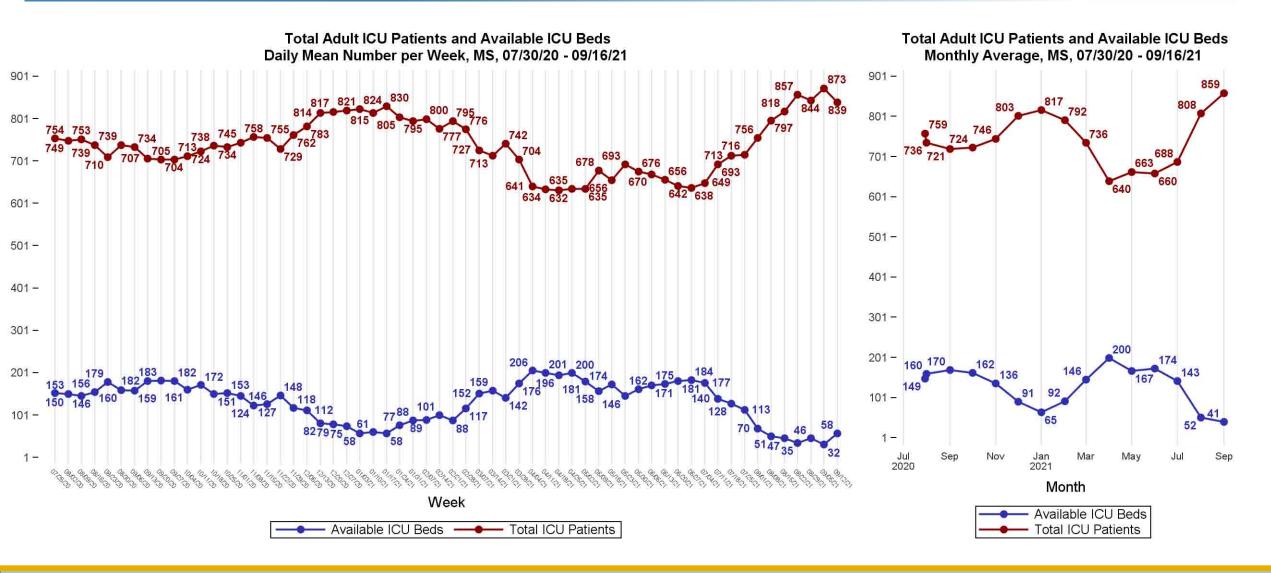
### Patients on Ventilators





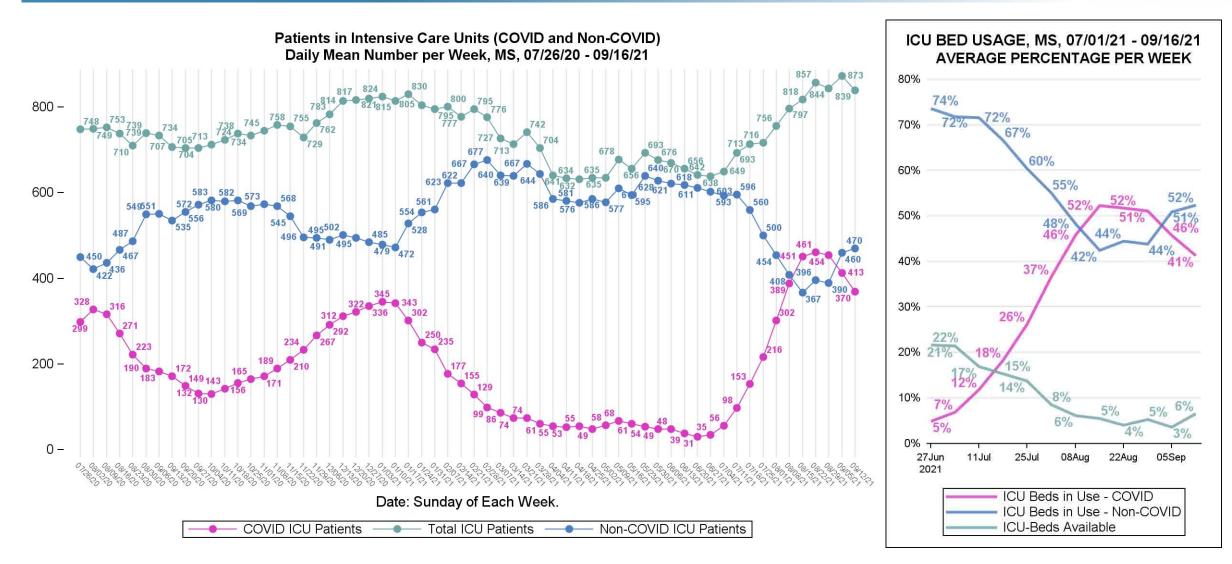
### ICU Bed Use





## COVID and NON-COVID PATIENTS IN ICU





### MED/SURGICAL COVID AND NON-COVID PATIENTS



