



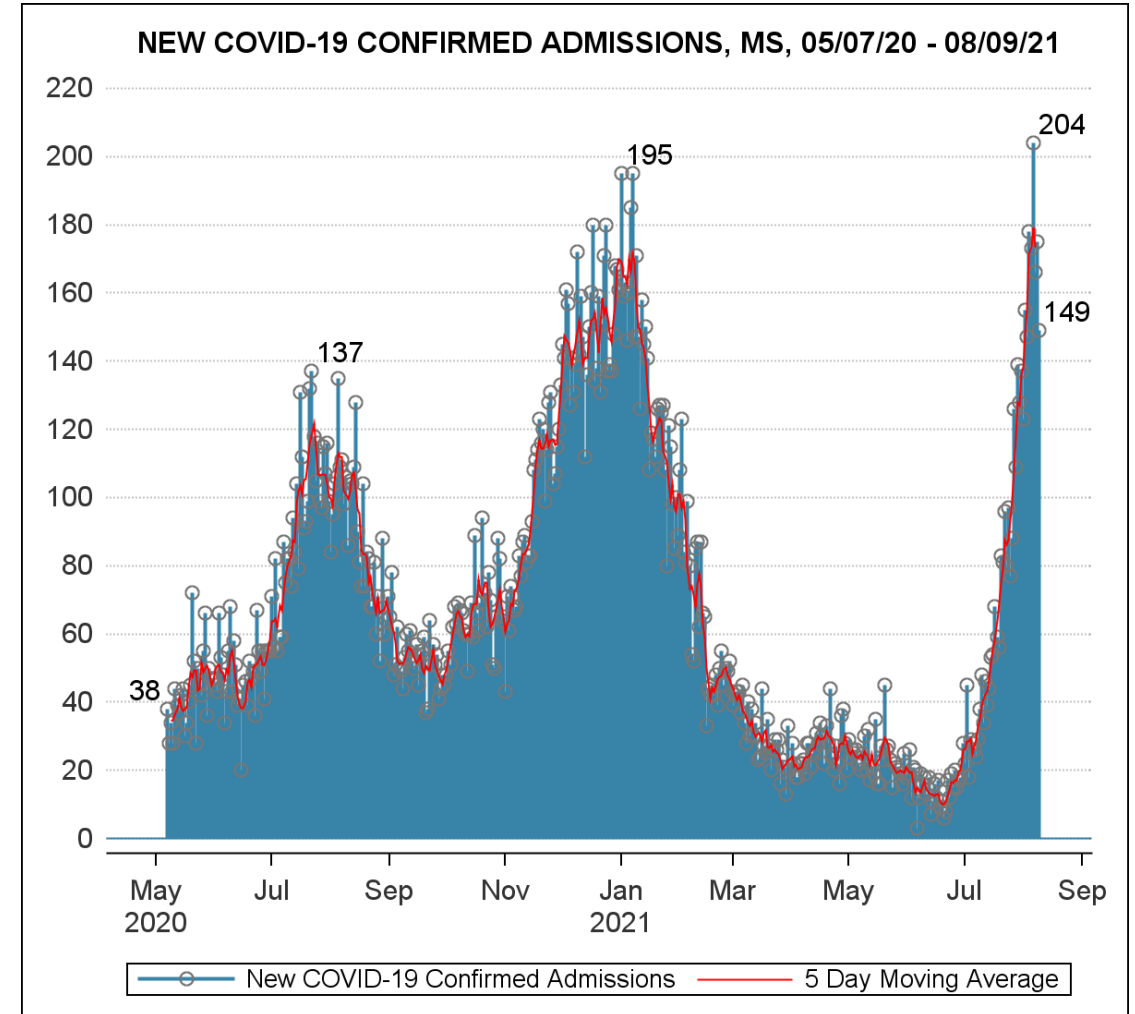
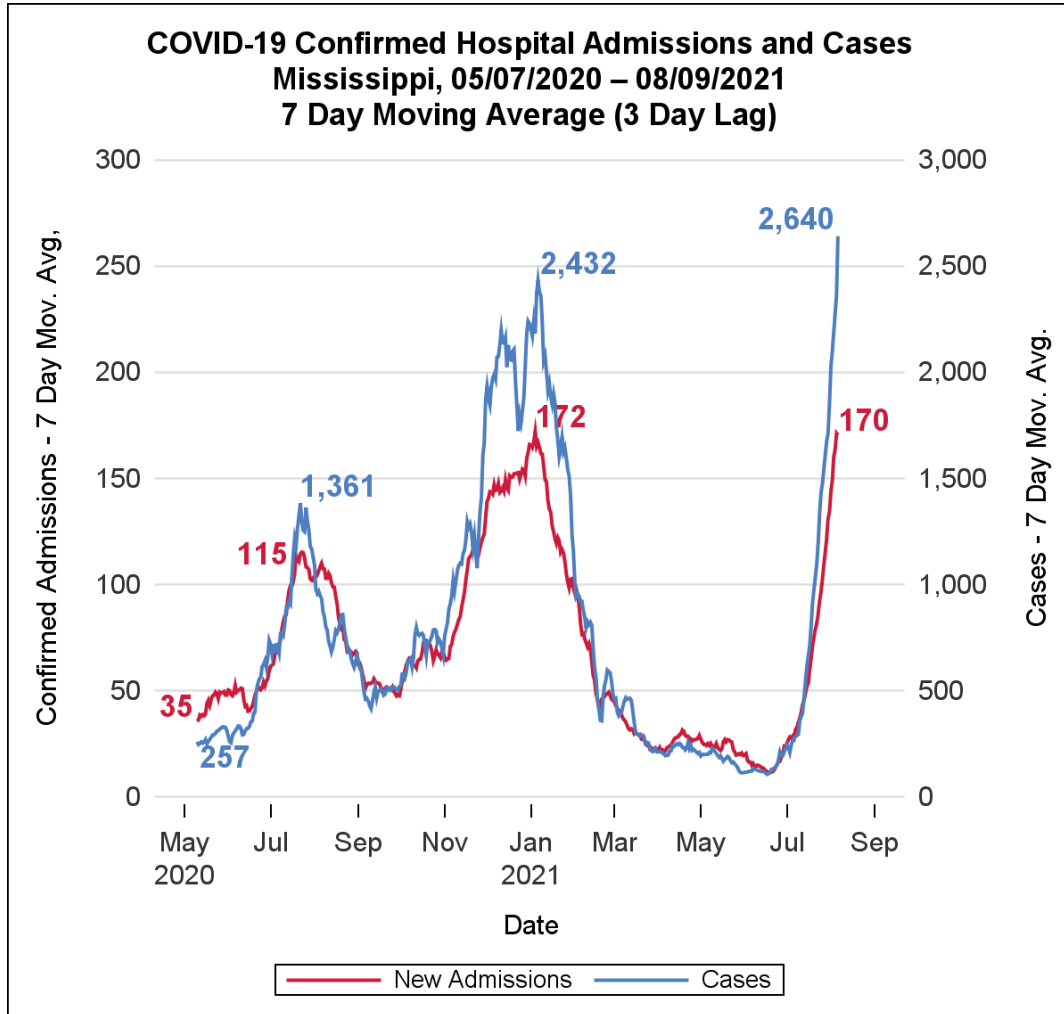
MISSISSIPPI STATE DEPARTMENT OF HEALTH

COVID Update

Thomas Dobbs MD, MPH

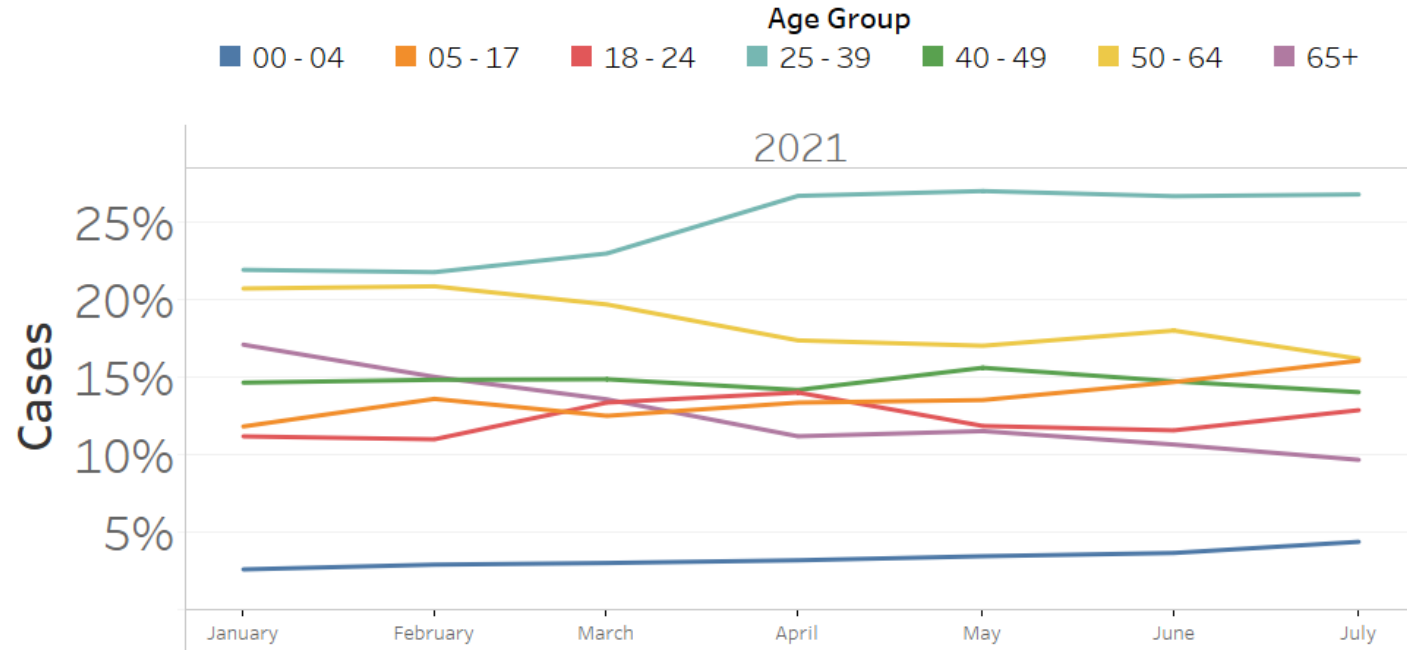
Where are we in the Pandemic

OVERVIEW



Proportion of Cases by Age Group

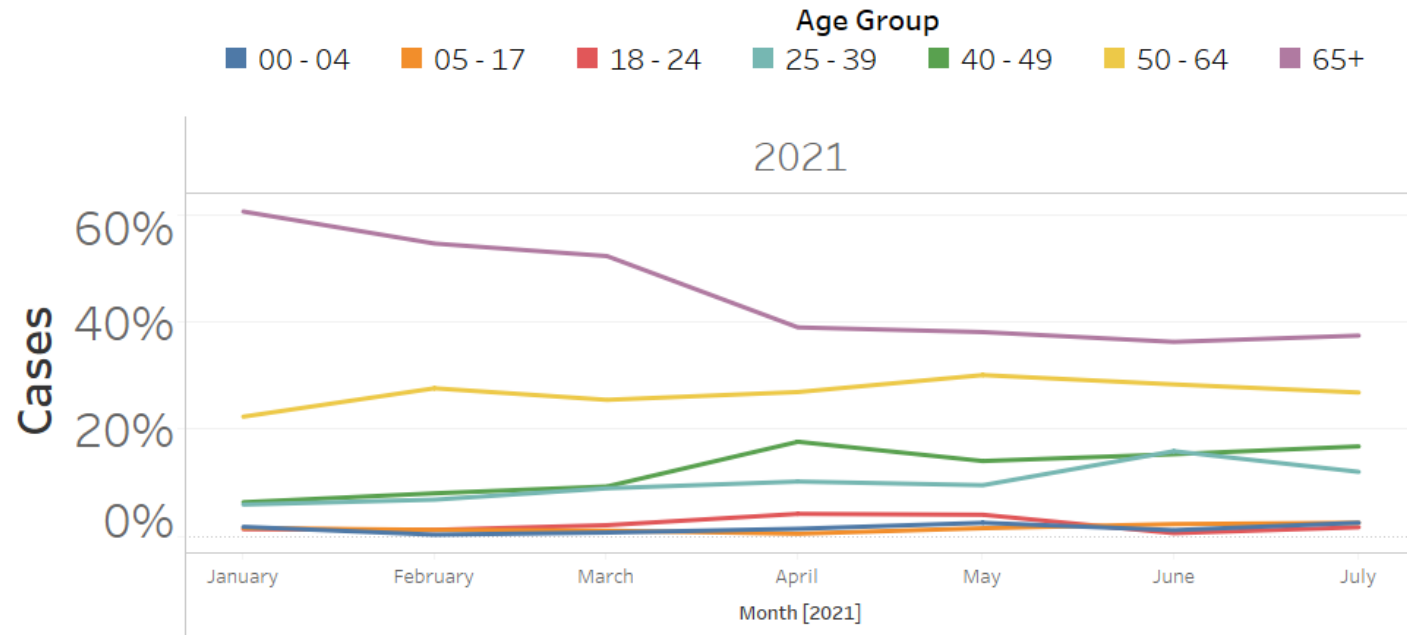
January 1, 2021 - July 31, 2021



Age Group	Jan	Feb	Mar	Apr	May	Jun	Jul
00 - 04	3%	3%	3%	3%	3%	4%	4%
05 - 17	12%	14%	13%	13%	14%	15%	16%
18 - 24	11%	11%	13%	14%	12%	12%	13%
25 - 39	22%	22%	23%	27%	27%	27%	27%
40 - 49	15%	15%	15%	14%	16%	15%	14%
50 - 64	21%	21%	20%	17%	17%	18%	16%
65+	17%	15%	14%	11%	12%	11%	10%

Proportion of Hospitalized Cases by Age Group

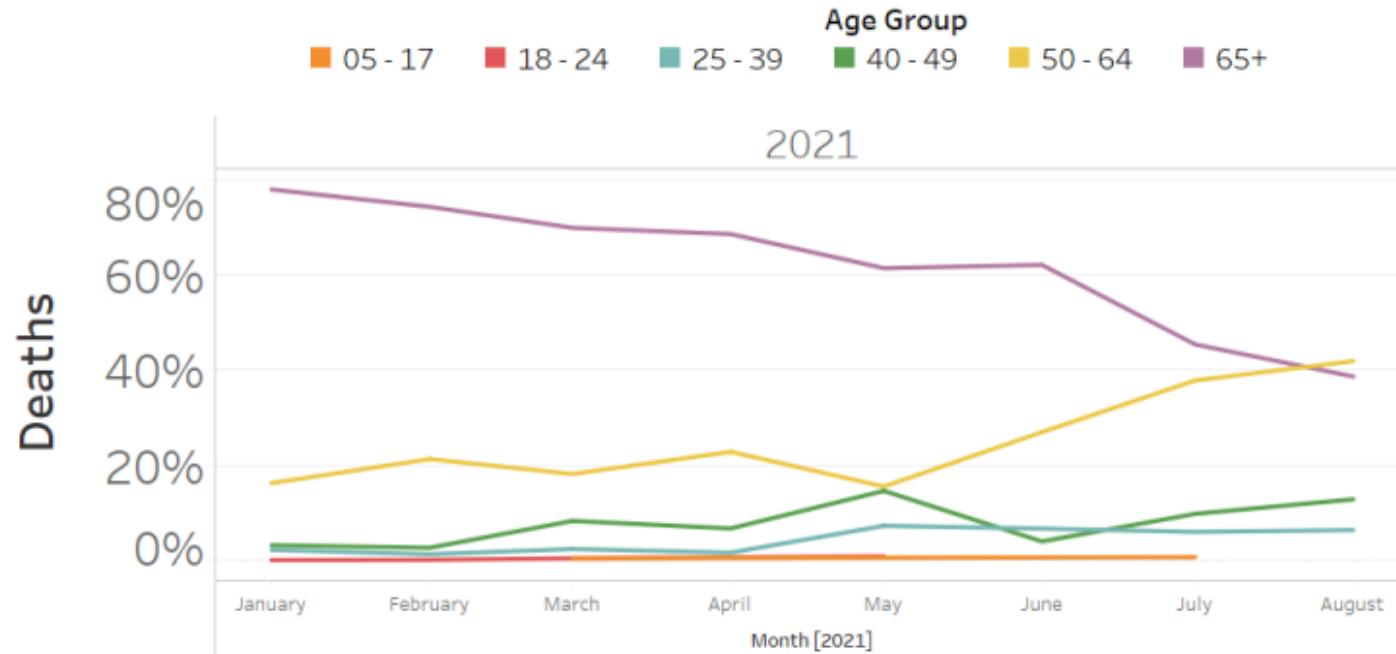
January 1, 2021 - July 31, 2021



Age Group	Jan	Feb	Mar	Apr	May	Jun	Jul
00 - 04	1.8%	0.3%	0.7%	1.4%	2.5%	1.1%	2.5%
05 - 17	1.5%	1.2%	1.0%	0.5%	1.5%	2.3%	2.5%
18 - 24	1.3%	1.2%	2.1%	4.2%	4.0%	0.6%	1.7%
25 - 39	5.9%	6.8%	9.0%	10.2%	9.5%	15.9%	12.0%
40 - 49	6.4%	8.0%	9.3%	17.7%	14.1%	15.3%	16.8%
50 - 64	22.4%	27.7%	25.5%	27.0%	30.2%	28.4%	26.9%
65+	60.7%	54.8%	52.4%	39.1%	38.2%	36.4%	37.5%

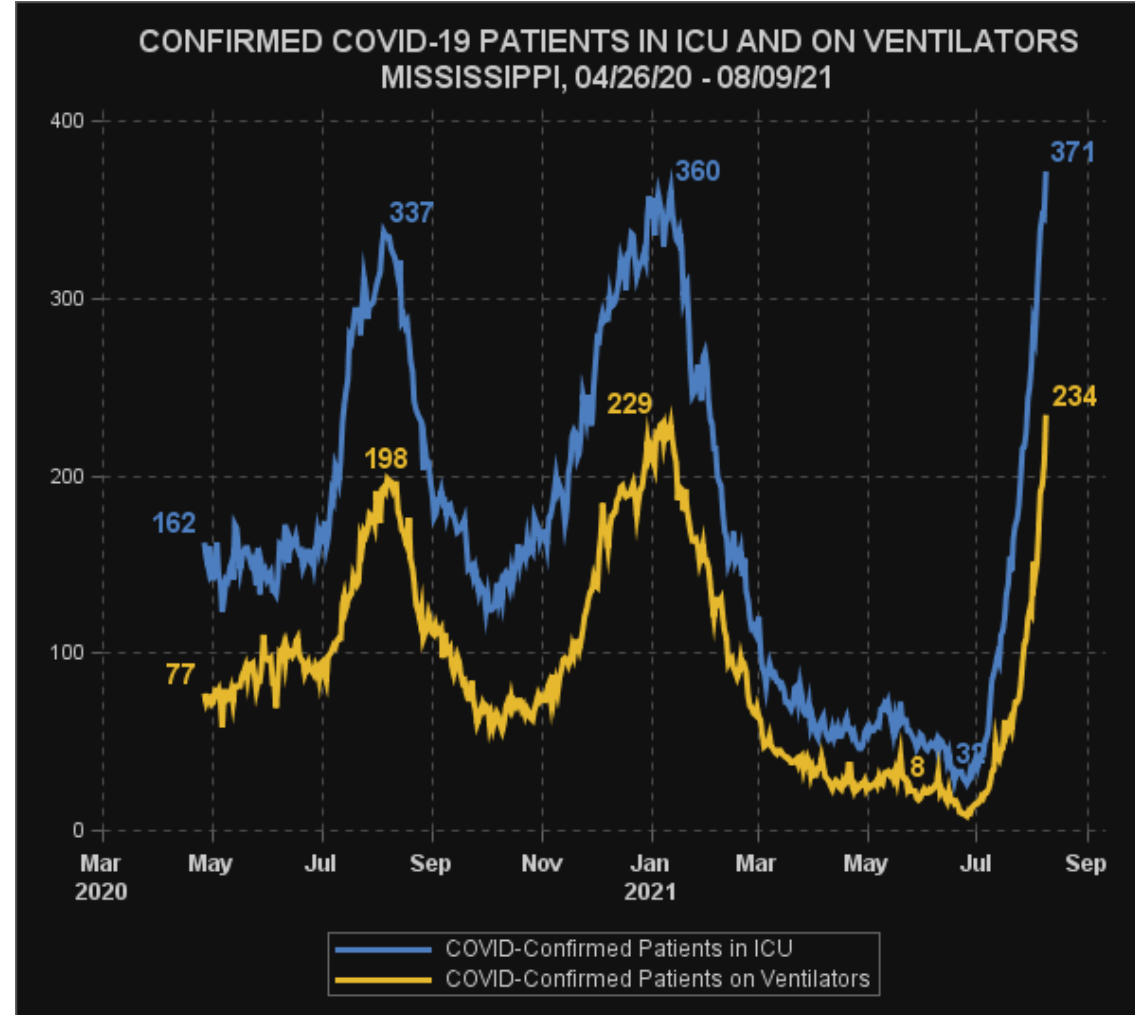
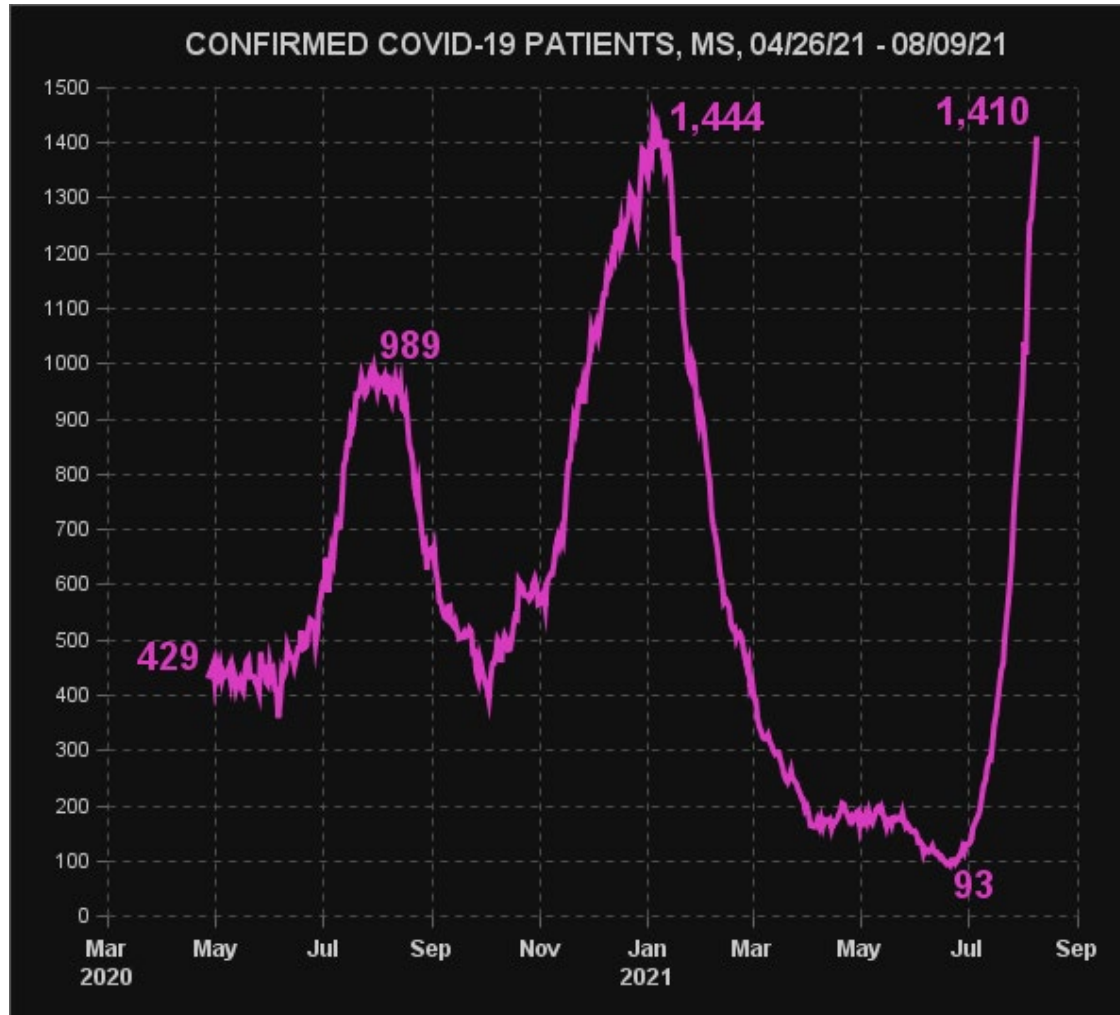
Proportion of Deaths by Age Group

January 1, 2021 - August 4, 2021



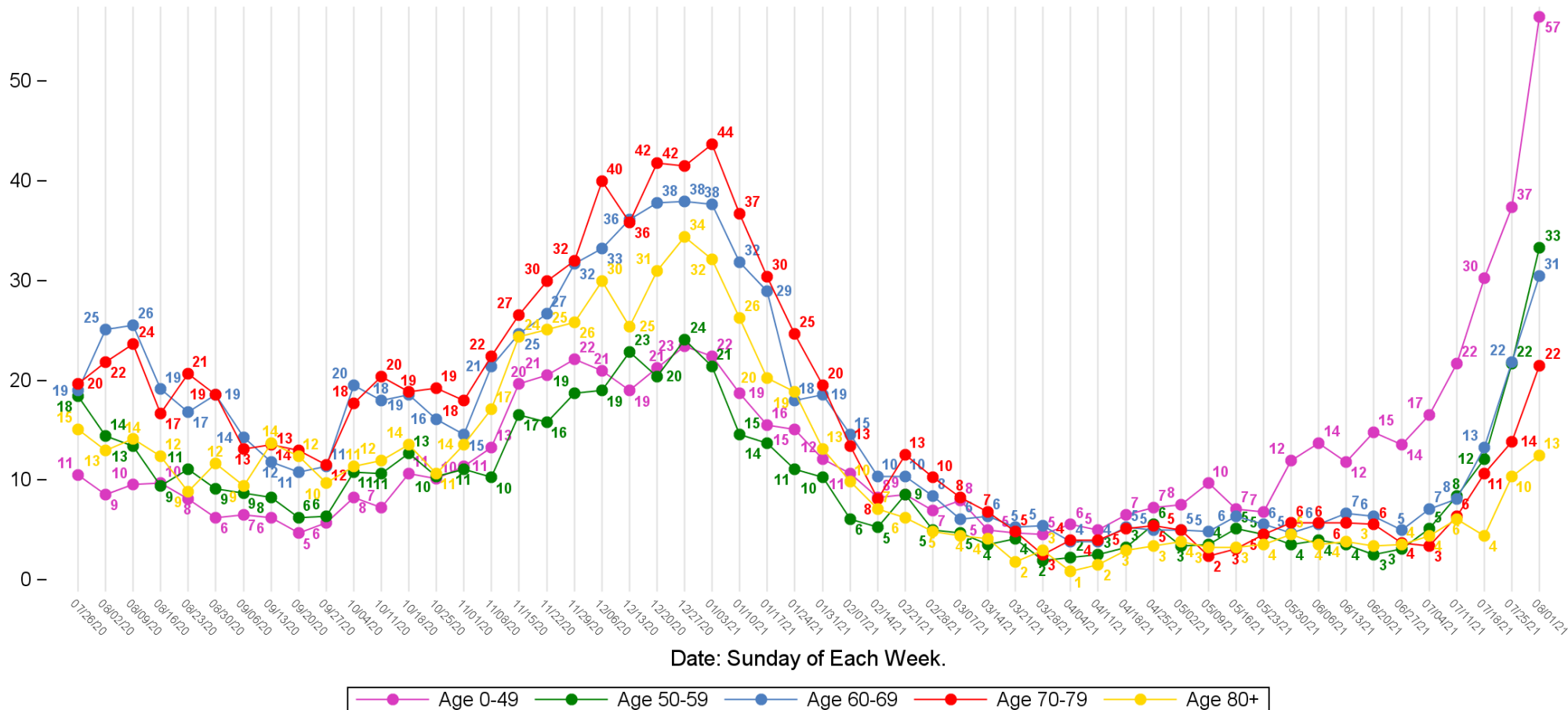
Patient A..	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
05 - 17			0.5%				0.8%	
18 - 24	0.1%	0.2%	0.5%		0.9%			
25 - 39	2.3%	1.4%	2.5%	1.7%	7.3%	6.8%	6.1%	6.5%
40 - 49	3.3%	2.7%	8.4%	6.8%	14.7%	4.1%	9.8%	12.9%
50 - 64	16.3%	21.4%	18.2%	22.9%	15.6%	27.0%	37.9%	41.9%
65+	78.0%	74.4%	70.0%	68.6%	61.5%	62.2%	45.5%	38.7%

Confirmed Patients




HHS Protect: Admissions by Age Group

CONFIRMED COVID-19 ADMISSIONS
Daily Mean Number per Week, MS, 07/26/2020 - 08/06/2021



What is the Delta Variant

WHO Label: Delta

Pango Lineage: B.1.617.2, AY.1, AY.2, AY.3 ([Pango lineage](#) )^a

Spike Protein Substitutions: T19R, (V70F*), T95I, G142D, E156-, F157-, R158G, (A222V*), (W258L*), (K417N*), L452R, T478K, D614G, P681R, D950N

Name ([Nextstrain](#) )^b: 21A/S:478K

First Identified: India

Attributes:

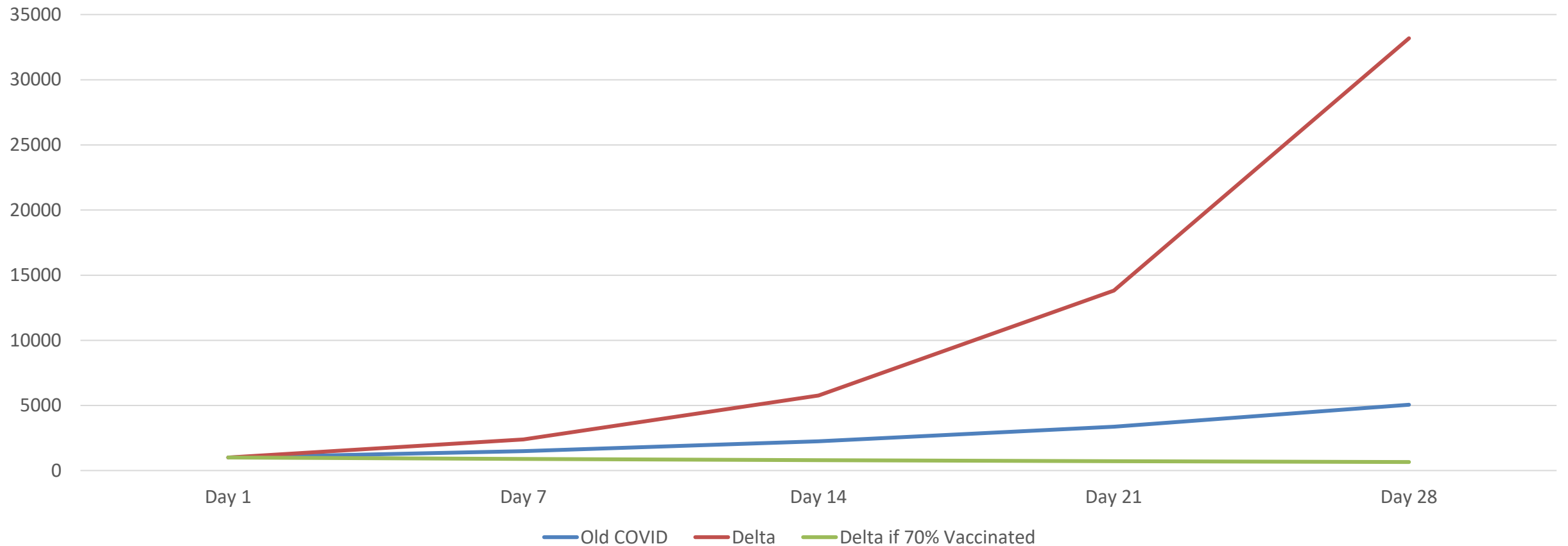
- Increased transmissibility⁻²⁹
- Potential reduction in neutralization by some EUA monoclonal antibody treatments^{-7, 14}
- Potential reduction in neutralization by post-vaccination sera⁻²¹

Delta Variant

- R_0 ~8-9 (compared to ~3 last year)
- 1000 times higher viral concentration
- Shorter incubation period (~2 days vs 4 days)
- Vaccine less effective (88% for mRNA vaccines)
- Enhanced re-infections
- More deadly?

Comparison of Transmission Dynamics

COVID Growth Over Time ($R_0 = 3$ – Old COVID, 6 for Delta)



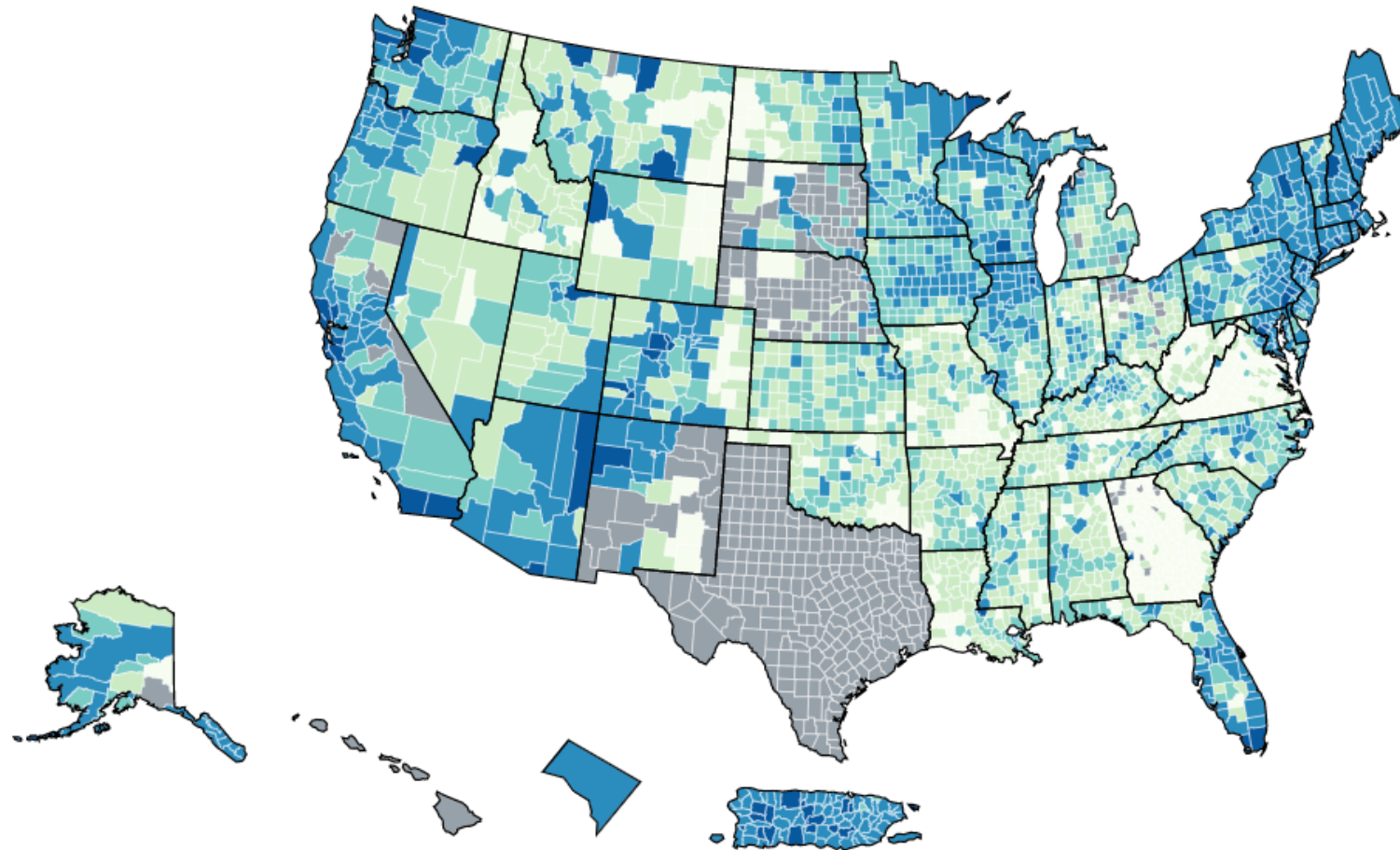
How did we get here and did it have to be this way?



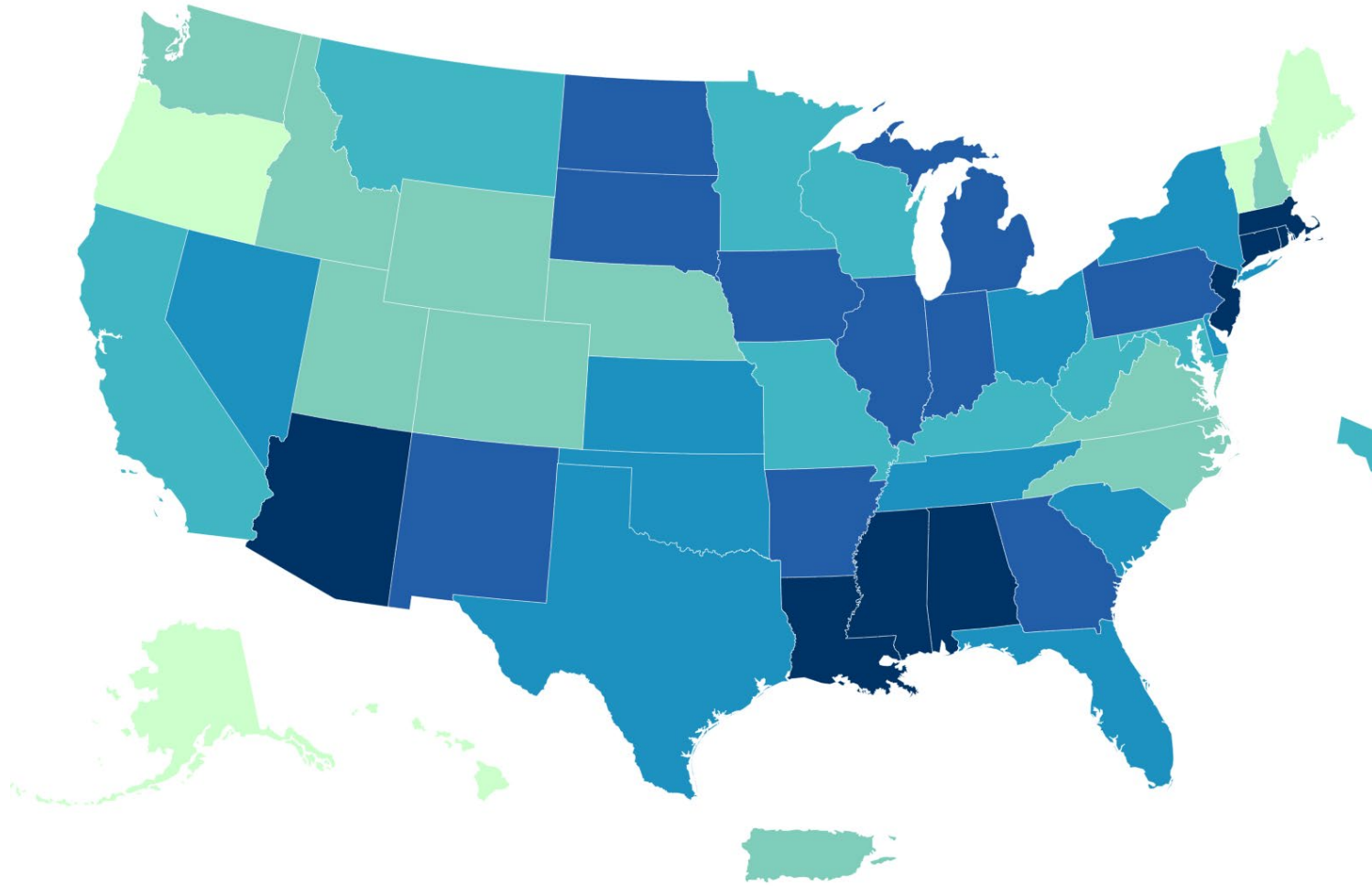
Addressing Common Myths

- COVID vaccines do not cause infertility. In fact, COVID itself has been shown to be harmful for both male and female reproductive health.
- COVID vaccines are extremely safe. COVID has killed over 7,500 Mississippians but there have been zero confirmed deaths from the vaccine.
- COVID vaccines do not contain chips, metal or cells.
- The COVID vaccines are some of the best studied vaccines in history and are not “experimental”. COVID vaccines are currently *authorized* by the FDA and full *approval* is anticipated soon – many months ahead of the review deadline.

Vaccination Rates in the U.S.



Death Rate / 100,000 MS Ranks #4



How do we get out of the pandemic?

Mississippi State Department of Health COVID-19 Vaccination Reporting

Updated as of 8a.m. August 9, 2021 (Data are Provisional)

Vaccine providers administering COVID-19 vaccine are required to report the doses administered to the Mississippi Immunization Information Exchange (MIIX), the statewide immunization registry, within 24 hours after administration

Total Reported Vaccinations by Mississippi Providers*

Total Doses Administered	2,273,490
People Receiving at Least One Dose**	1,269,106
People Fully Vaccinated***	1,056,682

*Includes Federal Agency Doses Administered (Bureau of Prisons, Veterans Health, Indian Health Services, Dept. of Defense)

**One dose of Pfizer/Moderna or one dose of Johnson and Johnson vaccine

***Two doses of Pfizer/Moderna or one dose of Johnson and Johnson vaccine

Vaccine Doses Distributed

Fed. Pharmacy Partnership LTCF (CVS/Walgreens)	88,725
Mississippi Enrolled Providers*	1,858,080
Total	1,946,805

*Includes hospitals, private clinics, and MSDH drive through clinics

Vaccine Doses Administered by Facility

Facility	First Dose	Second Dose
Hospital	144,427	129,962
Pharmacies*	366,715	232,714
MSDH Vaccination Efforts	401,865	375,145
Clinics	304,419	221,475

*Includes Doses administered in from CVS/ Walgreens LTCF Partnership

Federal Agency COVID-19 Vaccine Administration

Facility	First Dose	Second Dose
Bureau of Prisons	2,600	1,797
Veterans Health	23,065	19,951
Indian Health Service	4,387	3,260
Dept. of Defense	21,628	12,335

Vaccine Doses Administered by Race*

Race	Received at Least One Dose**	Fully Vaccinated***	Vaccinations	% of Total Doses Administered
White	661,381	564,331	1,197,440	57%
Black	445,563	365,620	793,406	38%
Asian	22,105	19,781	41,346	2%
AIAN****	3,024	2,320	5,254	0%
Pacific Islander	1,265	1,021	2,245	0%
Multi-racial	208	167	365	0%
Other	38,727	33,172	69,385	3%

*Those with unknown race are excluded

**One dose of Pfizer/Moderna or one dose of Johnson and Johnson vaccine

***Second dose of Pfizer/Moderna or one dose of Johnson and Johnson vaccine

****American Indian and Alaskan Native

Vaccine Doses Administered by Ethnicity

Ethnicity	Received at Least One Dose*	Fully Vaccinated**	Vaccinations	% of Total Doses Administered
Not Hispanic	1,079,570	912,220	1,947,628	89%
Hispanic	30,719	24,439	53,450	2%
Unknown	107,137	82,375	183,390	8%

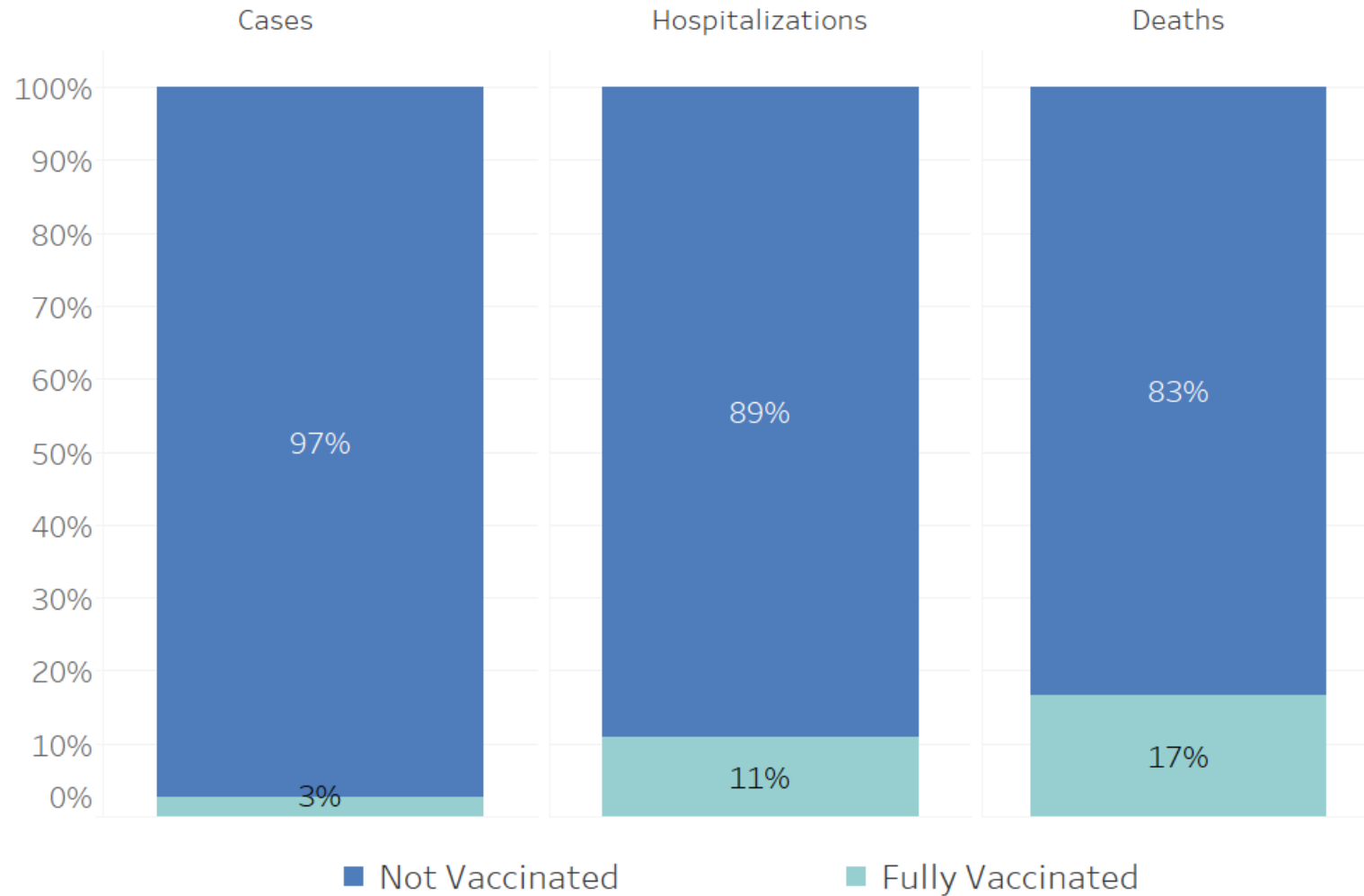
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MS & US Fully Vaccinated Rates by Age Groups

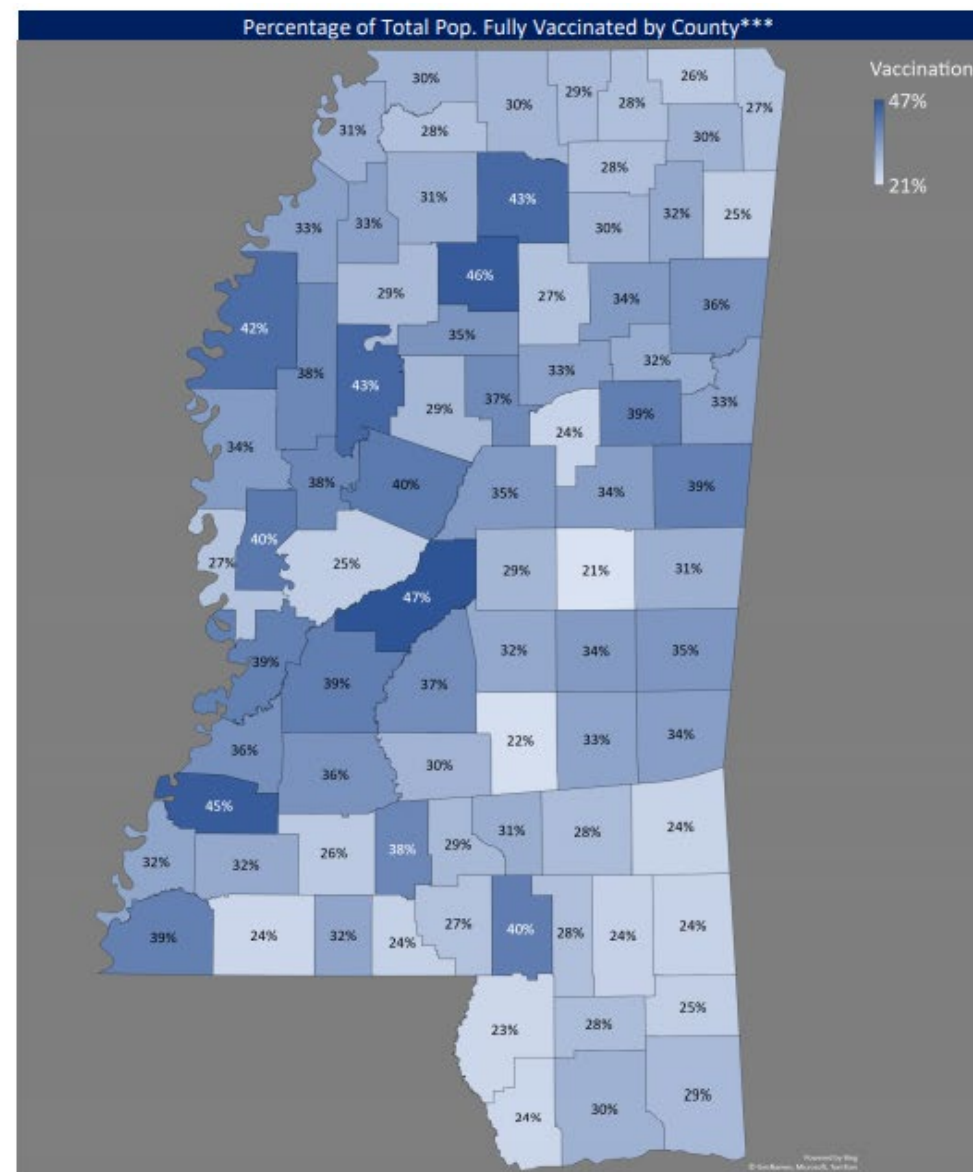
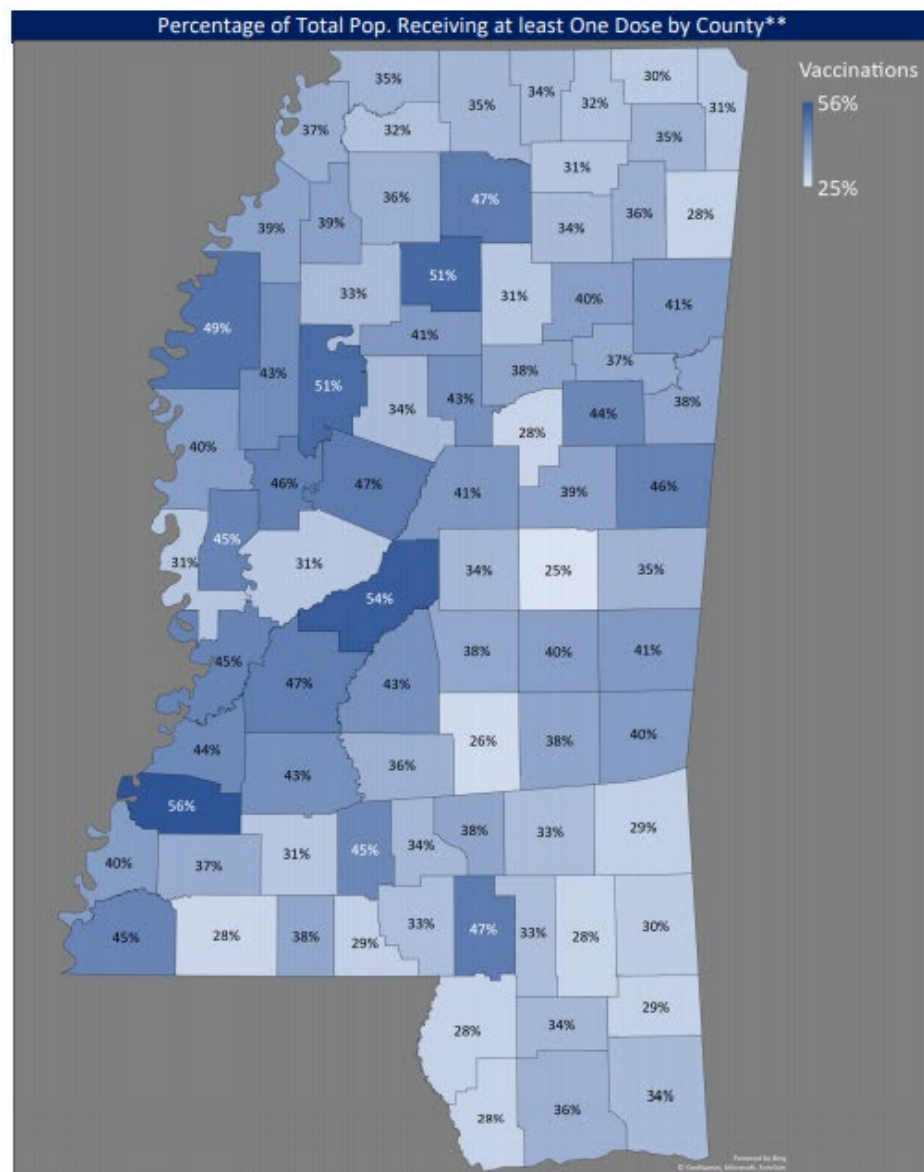
Age Groups	United States	Mississippi
% of total Pop	50%	35%
% ≥12 Years of age	58%	40%
% ≥18 Years of age	61%	43%
% ≥65 Years of age	80%	71%

Vaccination Status of COVID-19 Cases, Hospitalizations, and Deaths, Mississippi July 12 - August 8, 2021

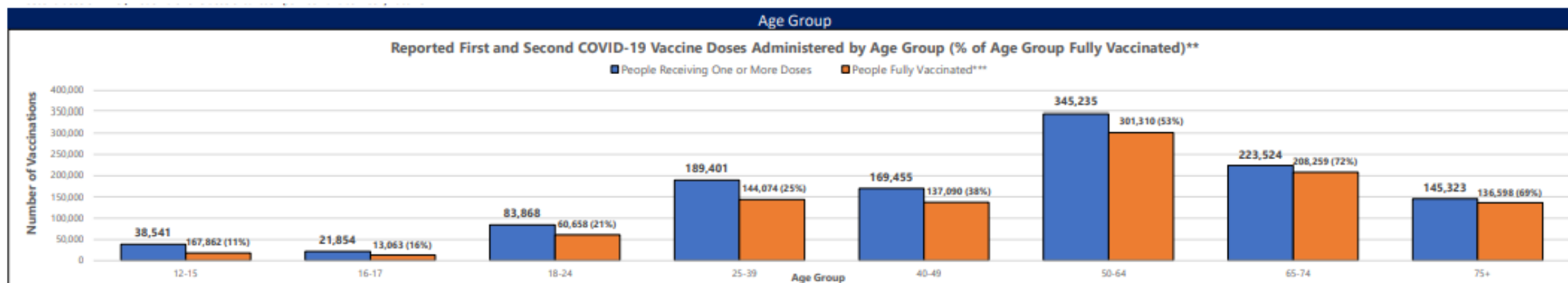


**Cases and Hospitalizations based on date of onset, test, or report to MSDH. Deaths based on date of death.*

Mississippi State Department of Health

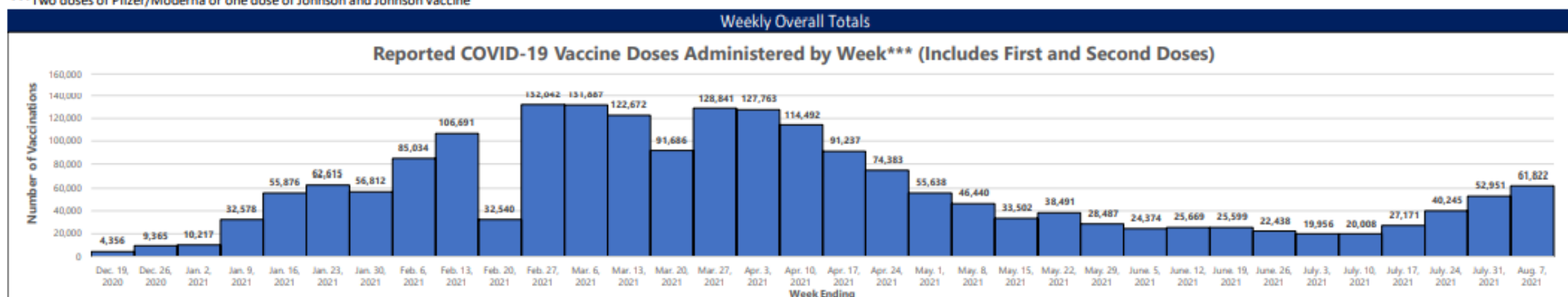


**One dose of Pfizer/Moderna or one dose of Janssen (Johnson and Johnson) vaccine
***Second dose of Pfizer/Moderna or one dose of Janssen (Johnson and Johnson) vaccine



**Those with unknown ages are excluded

***Two doses of Pfizer/Moderna or one dose of Johnson and Johnson vaccine



***Those with unknown week of vaccine administration are excluded

Survive the Delta Surge

- Vaccination
- Protect your family and your clan
- Masks indoors
- Avoid indoor social gatherings
- Keep vulnerable people extra safe
- Speak up / share reality