# COVID-19 WHERE ARE WE NOW?

AND SOME TOOLS YOU NEED AS WE BEGIN TO DE-IMPLEMENT SOME PANDEMIC PUBLIC HEALTH MITIGATIONS

### TODAY'S AGENDA

- A DATA DRIVEN
   APPROACH FOR DE IMPLEMENTING PUBLIC
   HEALTH MITIGATIONS
- REVIEW OF THE CURRENT NATIONAL, STATE AND LOCAL SITUATION
- LIFE SAVING MEDS FOR THE VULNERABLE
- Q'S & PERHAPS A'S



#### A DATA FOCUSED APPROACH

### HOW PEOPLE OF FAITH PROTECT THE VULNERABLE

THIS IS NOT ABOUT REDUCING INDIVIDUAL RISK

IT'S ABOUT PROTECTING THE VULNERABLE AND HOSPITAL SYSTEMS

# Riding the waves: (De)implementation of public health mitigation layers

**Purpose**: To leverage various public health tools to decrease the risk of individual-level infection. But also, perhaps more importantly (particularly among fully vaccinated), empower individuals to reduce transmission in a community, so hospital systems and the vulnerable are not at undue risk.

Introduce you to the document

### THIS APPROACH IS BASED ON THE MODELING OF EPIDEMIOLOGIST KATELYN **JETELINA** AND COLLEAGUES

- As the faith community enters a period OF RAPID CHANGE IN THE PANDEMIC, WE NEED A DECISION MAKING FRAMEWORK THAT
  - S INFORMED BY SCIENCE AND DATA
  - THAT IS COMPREHENSIBLE AND FLEXIBLE ENOUGH CHANGE AS CASE WAVES CREST AND FALL
  - THAT PROTECTS THE VULNERABLE PEOPLE AND ALLOWS FUNCTIONAL HOSPITALS
  - THAT GIVES PEOPLE A CHANCE TO LIVE IN NORMALITY AS MUCH AS POSSIBLE

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	Red	Orange	Yellow	Blu
County-level cases per 100,000 in 7 days Test Positivity Rate*	>=100 >10%	50-99 8-9.99%	10-49 5-7.99%	<10 <59
Mask** indoors in public	Yes	Yes	No	No
Antigen testing (Symptomatic)	Positive? T Negative? Rete		Positive or Negative? Retest	Negative? Positive?
Isolation (if positive test)		Test-to-ex	jt***	
Exposure****	Not boosted: Quarantine for 5 days Boosted: No quarantine, test 5 days after exposure test 5 days exposur			
Community-level action	Improve ventilation in spaces, improve equitable access to antige tests, ramp up supply of antivirals, continue vaccination campaig locally and globally, strengthen surveillance, research long COVID and treatments, & fight disinformation.			
Examples of activities if not sick	-Avoid indoor, crowded public areas where not 100% masked and vaccination status unknown -Avoid flying, if possible -Extra vigilant around vulnerable, like grandparents -Avoid indoor dining -Avoid indoor high-exertion public activities, like trampolline parks	-Avoid indoor, crowded public areas where not 75% masked and vaccination status unknown -Flying okay -Vigilant around vulnerable, like grand/great- grandparents -Indoor dining okay	-Indoor, crowded public events okay -Flying okay -Vigilant around vulnerable, like grand/great- grandparents -Indoor dining okay	No limita activities

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This guide was created by: **Katelyn Jetelina, MPH PhD** (epidemiologist and founder of Your Local Epidemiologist) with critical feedback from **Eve Bloomgarden, MD** (clinician and co-founder of IMPACT): **Chana Davis, PhD** (geneticist, Founder of @fueledbyscience and Nerdy Gir at Dear Pandemic; **Maria Clayman, MPH PhD** (communications centist)

### HIGH LEVELS OF VACCINATION UNLIKELY IN NEAR FUTURE

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<85%: Use the tools below dependent on community transmission

85% VAX RATES are SADLY, UNLIKELY Carolina is currently 59% Orange county, 80%

#### USE DATA AVAILABLE FROM THE CDC TO DETERMINE LEVEL OF RISK

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Transmission		Red	Orange	Yellow	Blue		
Severity indicators	County-level cases per 100,000 in 7 days Test Positivity Rate*	>=100 >10%	50-99 8-9.99%	10-49 5-7.99%	<10 <5%		

THERE ARE FOUR ZONES OF RISK. RED IS THE HIGHEST RISK. ZONES ARE DETERMINED BY (1)THE NUMBER OF NEW CASES/100K PERSONS/7DAYS AND (2) THE TEST POSITIVITY RATE.

### WHAT DOES LIFE LOOK LIKE IN THESE ZONES?

AS THIS WAVE SUBSIDES AND OUR ZONE IMPROVES,

OUR ABILITY TO SAFELY RESUME OUR NORMAL INTERACTIONS IMPROVES —ALL WHILE

PROTECTING THE VULNERABLE AND HOSPITALS

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Finally, testing, quarant Isolation changes

#### IMPORTANT INFORMATION TESTING, ISOLATION AND COMMUNITY ACTION

- AS THE RISK LEVEL DECLINES,
   OUR APPROACH TO TEST
   INTERPRETATION SHOULD
   CHANGE—DRIVEN BY PRE-TEST
   PROBABILITY.
  - WHEN THE RISK OF BECOMING INFECTED IS HIGH, A POSITIVE TEST SHOULD BE TRUSTED.
  - WHEN THE RISK OF INFECTION
     IS VERY LOW, A POSITIVE TEST
     SHOULD BE VIEWED WITH
     SUSPICION AND REPEATED
- NOTE ESPECIALLY THE LOWER PANEL. VENTILLATION, AND EDUCATING THE VULNERABLE ABOUT RAPID ACCESS TO ANTIVIRALS ARE CRITICAL

		Red	Orange	Yellow	Blue	
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	Mask** indoors in public	Yes	Yes	No	No	
	Antigen testing (Symptomatic)	Positive? Trust result Negative? Retest in 24 hours		Positive or Negative? Retest	Negative? Trust Positive? Retest	
	Isolation (if positive test)	Test-to-exit***				
	Exposure****	Not boosted: Quarantine for 5 days Boosted: No quarantine, test 5 days after exposure  No quarantine test 5 days after exposure				
	Community-level action	Improve ventilation in spaces, improve equitable access to antigen tests, ramp up supply of antivirals, continue vaccination campaigns locally and globally, strengthen surveillance, research long COVID19 and treatments, & fight disinformation.				

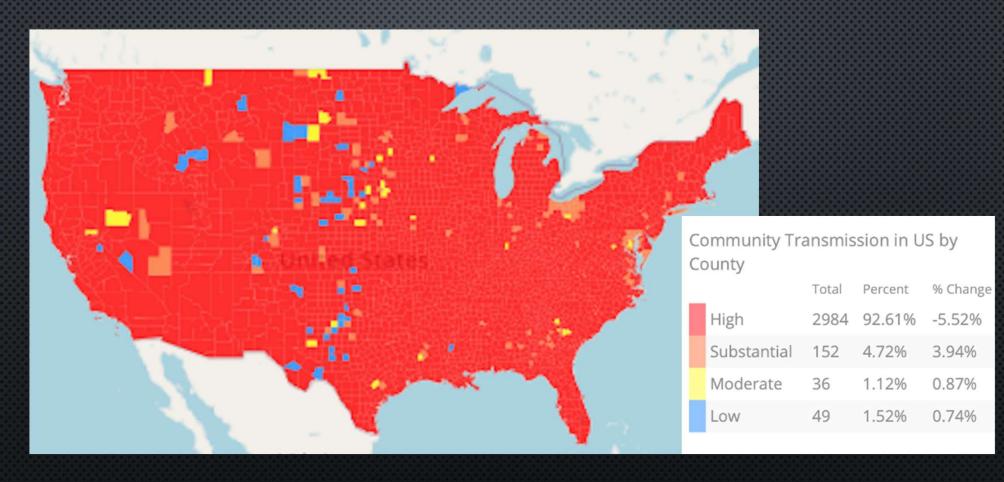
# SITUATION IN THE U.S.

- New cases are down 80% since their peak in mid January
  - BUT ARE STILL ABOVE
     100,000/DAY
  - DEATHS STILL 2300/DAY
- HOSPITALIZATIONS AND ICU
   ADMITS ARE DOWN MORE THAN
   35% IN TWO WEEKS
- Cases are currently declining in every state



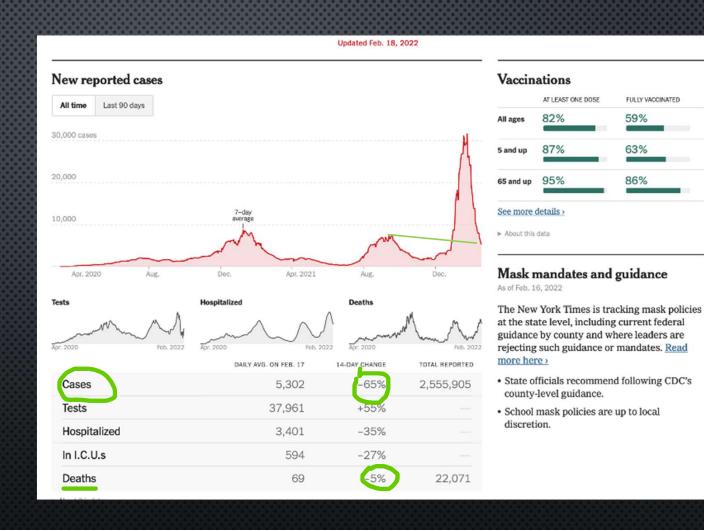
Heat map

## COUNTY LEVELS OF TRANSMISSION 2.19.22



# NC CASES FALL QUICKLY

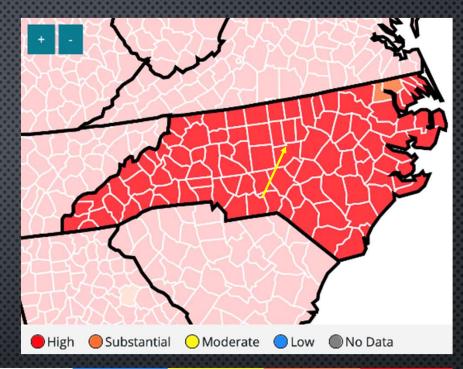
- THE NUMBER OF NEW
   CASES HAS FALLEN
   65% OVER TWO
   WEEKS
- DEATH RATES ARE FINALLY DROPPING
- BUT NEW CASE RATES
   ARE STILL VERY NEAR
   THE DELTA PEAK



### NORTH CAROLINA KEY METRICS

• Total New Cases/100k Persons over the Last 7 Days: 350

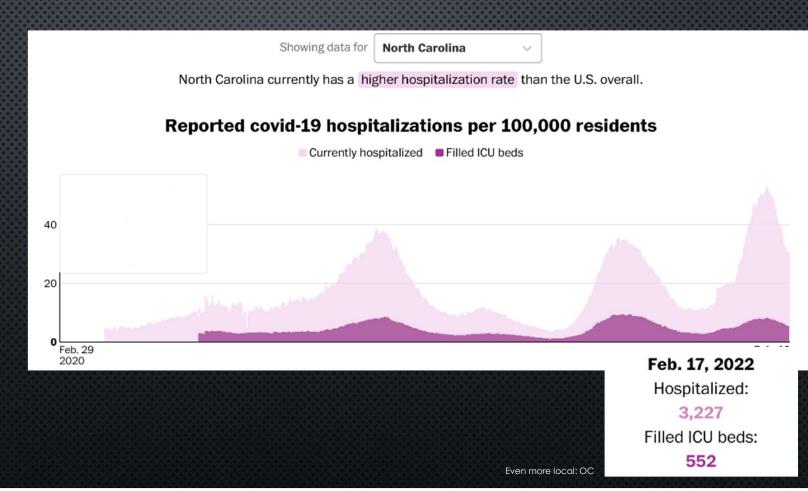
PERCENTAGE OF PCR TESTS
 THAT ARE POSITIVE DURING THE LAST 7 DAYS: 7.8%



Community Transmission Levels	Low Transmission	Moderate Transmission	Substantial Transmission	High Transmission
Total new cases per 100,000 persons in the past 7 days	0-9.99	10-49.99	50-99.99	≥100
Percentage of NAATs that are positive during the past 7 days	0-4.99%	5-7.99%	8-9.99%	≥10.0%

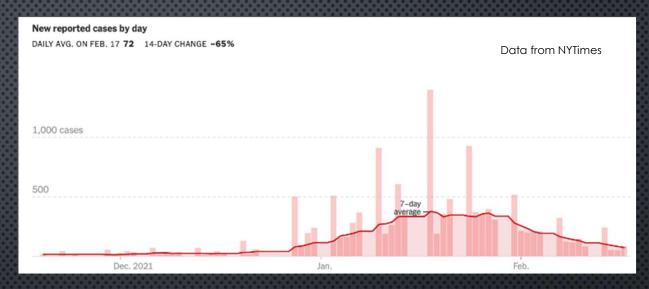
### NC HOSPITALIZATIONS

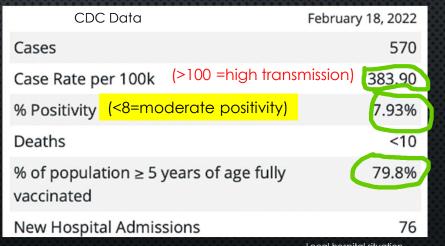
- HOSPITALIZATIONS IN NC ARE FALLING, BUT STILL QUITE HIGH RELATIVE TO THE REST OF THE COUNTRY
- It's not just the BEDS, it's the nurses.
  - ONE IN FIVE
     HEALTH CARE
     PROVIDERS LEFT
     THEIR JOBS IN THE
     LAST TWO YEARS
  - BEDS WITHOUT SKILLED NURSES ARE JUST FURNITURE



### ORANGE COUNTY STILL IS A HIGH RISK TRANSMISSION ZONE

- NEW CASE RATE/100k
   PERSONS/7DAYS = 383
- PCR TEST POSITIVITY = 7.93%
- VAX RATE = 80%
  - GETTING CLOSER TO 85% AND ENTERING THE BLUE ZONE

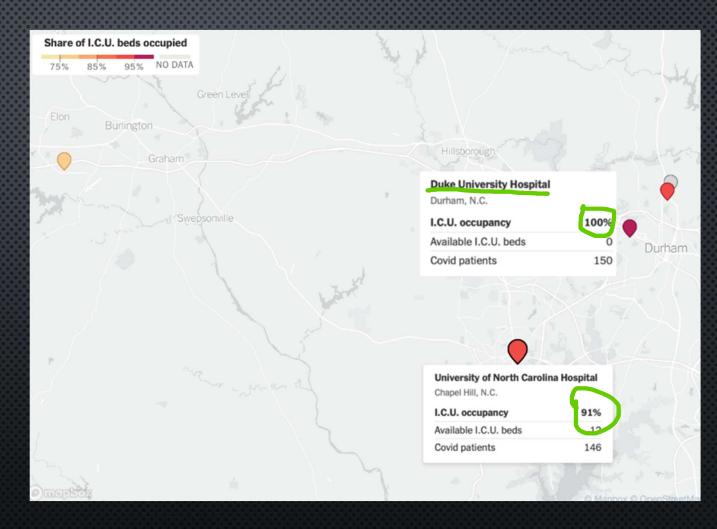




Local hospital situation

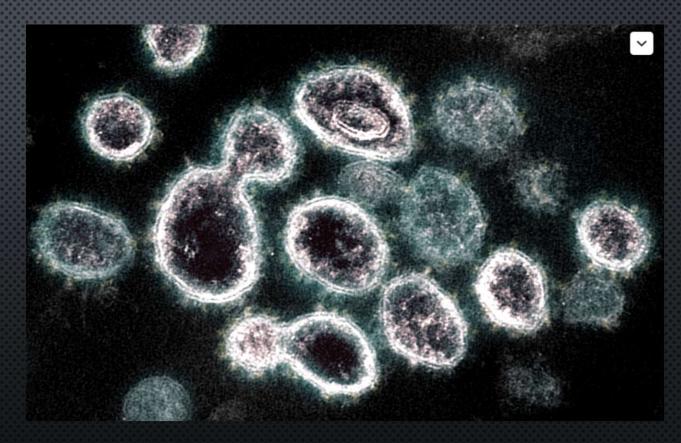
## LOCAL ICU CAPACITY STILL OVERWHELMED

- GENERALLY ACCEPTED THAT
   PATIENT CARE DETERIORATES
   WHEN ICU CAPACITY IS IN
   EXCESS OF 85%
- THIS EFFECT IS MULTIPLIED
   DURING A NURSING
   SHORTAGE WHEN A NURSE IS
   ASKED TO CARE FOR MORE
   THAN THE USUAL NUMBER OF
   PATIENTS



# HOW WE FURTHER PROTECT THE VULNERABLE IN OUR CONGREGATIONS COVID IS NOW A TREATABLE DISEASE ACT EARLY TO AVOID HOSPITALIZATIONS AND SAVE LIVES

- THERE ARE NOW A VARIETY OF MEDICATIONS AVAILABLE THAT DRAMATICALLY REDUCE HOSPITALIZATION AND DEATH IN HIGH RISK PATIENTS
- BUT THESE MEDICATIONS MUST BE
  GIVEN EARLY IN THE INFECTION
- If you are someone for whom you provide care is at high risk —have a plan in place



# THE VULNERABLE: WHO IS AT RISK FOR POOR OUTCOMES WITH COVID-19?



- • Older age (65 years or older))
- OVERWEIGHT OR OBESE
- CHRONIC KIDNEY DISEASE
- O DIABETES
- CARDIOVASCULAR DISEASE
- O CHRONIC LUNG DISEASE
- O PREGNANT OR RECENT PREGNANCY
- SICKLE CELL DISEASE
- O NEURODEVELOPMENTAL DISORDERS
- MEDICAL-RELATED TECHNOLOGICAL DEPENDENCE
- Cancer not in remission, solid organ transplant
- CURRENTLY RECEIVING IMMUNOSUPPRESSIVE TREATMENT: SOME INFLAMMATORY OR ARTHRITIS MEDICATIONS, CHEMOTHERAPY, HIGHER DOSE STEROID TREATMENT
- O LIVER DISEASE
- POORLY CONTROLLED HIV DISEASE
   (THIS IS A PARTIAL LIST)

# THESE MEDS ONLY WORK IN EARLY COVID—MANY ARE IGNORANT OF THEIR EXISTENCE

- DENTIFY PEOPLE WHO MAY BE AT HIGHER RISK
- Have several COVID rapid tests in house
  - KNOW HOW TO USE THE TEST.
  - Use them as soon as there is any suspicion of infection
- IDENTIFY THE CARE PROVIDER WHO YOU WILL CALL IF THERE IS A POSITIVE TEST SO THAT YOU CAN INITIATE TREATMENT QUICKLY
  - Confirm who you should call evenings or weekends
- KEEP A LIST OF THE PATIENTS MEDS QUICKLY AVAILABLE
- ACT EVEN IF THE PATIENT SEEMS ONLY MILDLY ILL
  - AFTER THE PATIENT IS SIGNIFICANTLY ILL, THE MEDICINES WILL NOT WORK



COVID QUESTIONS?



# HOW DO WE KNOW WHEN IT'S SAFE TO UNMASK OR RESUME A MORE NORMAL LIFE?

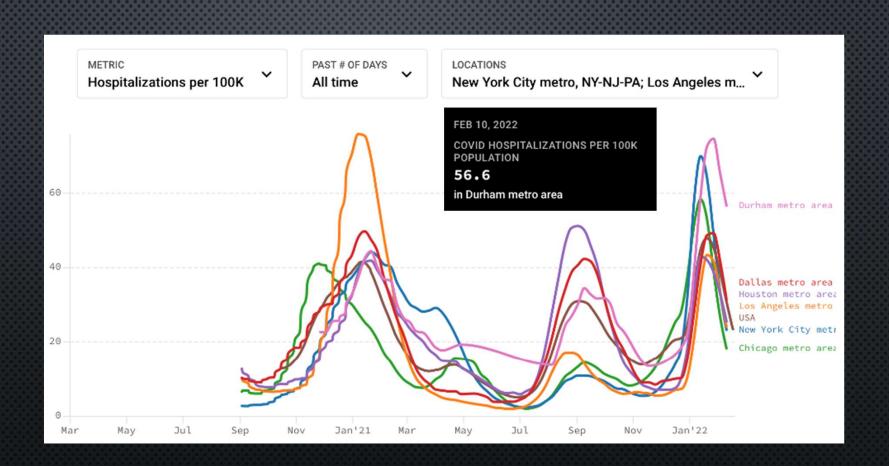
- We're all weary of COVID AND EAGER TO GET BACK TO A MORE NORMAL LIFE, BUT WE NEED TO MAKE SMART AND DISCIPLINED DECISIONS.
- FOCUS ON:
  - Number of New Cases/100K
     PERSONS/WEEK
  - TEST POSITIVITY RATE
  - THE ABILITY OF OUR HOSPITALS TO RESUME NORMAL, QUALITY CARE FOR ALL PROBLEMS

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\*If the two indicators suggest different transmission levels, the higher level is selected. Currently, case and TPR are an adequate measure for sun-reliance. However, this may change with the increase in antigen testing. When cases and TPR significantly diverge we will reserve to integrate another metric for behavior, like wastewater surveillance. \*\*Cusality, well fitting mask, like N95, KP94. \*\*\*\*Do not leave solation before receiving a negative apid antigen test. If not possible due to employment, leave isolation after 5 days and may with a N95. \*\*\*A close contact is someone with was less than 6 feet away from an infected person (aboratory-confirmed or a clinical diagnosis) for a cumulative total of 15 minutes or more over a 24-hour period. For example, three individuals 5-minute exposures for a total T5 minutes. People who are exposed to someone with CDVID-19 after they completed at least 5 days of isolation are not considered close contacts.

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SOUTH AFRICA
OMICRON NOW
DECLINING MUCH
SLOWER



### UTILIZE TOOLS BASED ON TRAMISSION RISK

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/er