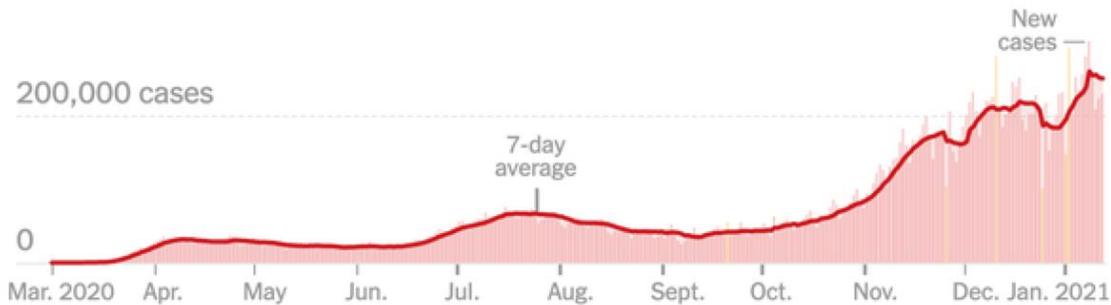


This edition will focus exclusively on vaccine news, since that remains the primary focus. As I mentioned in the Town Hall this week, however, we cannot ignore the reality that right now we are **enduring the worst overall month of this pandemic** regarding cases (>200,000 daily), hospitalizations (many at full capacity and triaging care with ambulances declined if patient unlikely to survive), and deaths (> 9/11 attack every day with total approaching 400,000!).

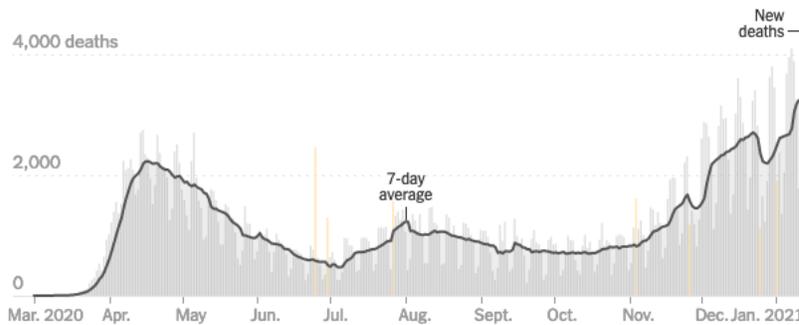
Regardless of vaccines, herd immunity is not predicted until late 2021 or 2022 so we **must continue our masks, distancing, hand and cough hygiene, reduced travel and staying home when sick. But, pandemic will be controlled MUCH FASTER with broad vaccination efforts**

New reported cases by day in the United States



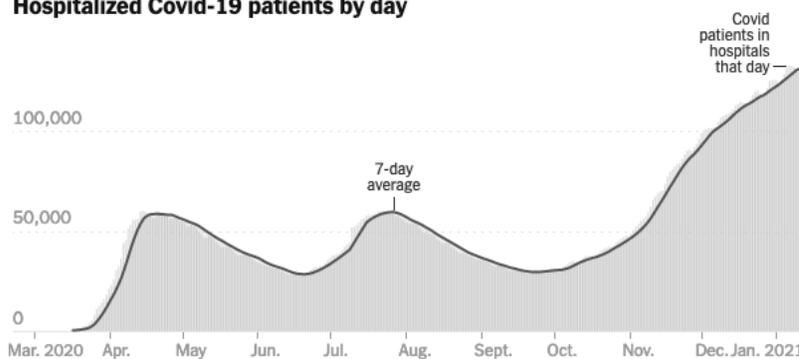
	TOTAL REPORTED	ON JAN. 12	14-DAY CHANGE
Cases	22.9 million+	229,712	+37% →
Deaths	382,682	4,406	+49% →
Hospitalized		131,326	+9% →

New reported deaths by day



These are days with a reporting anomaly. Read more [here](#).

Hospitalized Covid-19 patients by day



Source: Hospitalization data from the Covid Tracking Project. * Currently hospitalized is the number of patients with Covid-19 reported by states to be in a hospital on that day. Dips and spikes could be due to inconsistent reporting by hospitals.

- Recent study = **59%** COVID-19 infections from **asymptomatic people**
 - **35%** pre-symptomatic
 - **24%** never symptomatic
- **Household contacts** – important venues for transmission
- Higher risk = **symptomatic** > asymptomatic ; **adults** > children; **spouses** > other family
- Cases low among children, even after schools reopened

VACCINE NEWS

- Both Pfizer and Moderna vaccines - mRNA technology showing 95% effectiveness
 - *how they work* <https://twitter.com/JohnsHopkins/status/1349517083692957698>
 - Can still become infected with coronavirus but odds reduced to **only 1 in 20** compared to those without vaccination
 - If infected, *much milder illness*; NO ONE required hospitalization (study)
 - In Israel, first Pfizer shot reduced infections by 50% after just 14 days
- Pfizer (likely Moderna) show efficacy for more transmissible UK and South Africa variant
- Johnson & Johnson vaccine candidate looks very promising on early data from NEJM
 - May require only single dose; likely 3rd vaccine to be available in 2-3 months

- Pfizer and Moderna vaccines – unstable molecules that DO NOT CROSS PLACENTA so would not pass to fetus
 - Generally considered safe for pregnant and nursing females but studies did not include this population; therefore no long term safety data
 - My 19 and 23 y.o. daughters are planning to be vaccinated when able
 - American College of Obstetrics and Gynecology favors vaccination and recommends discussing with one’s own physician for risks and benefits
 - Society of Maternal Fetal Medicine specifically recommends vaccination for female health care workers because pregnancy is considered “vulnerable” population for more complicated infection
 - CDC recommends vaccine for patients with immunosuppression, and history of autoimmune conditions, Guillain-Barré and Bell’s palsy
 - Vaccine recommended for those already recovered from COVID-19
 - Contraindications: allergy to any specific ingredient
 - Vaccines DO NOT IMPLANT MICROCHIPS OR ALTER GENES OR DNA
- **Vaccination = Risk : Benefit Analysis** for each individual
 - **Benefits** – avoid acute COVID-19 infection, hospitalization, death
 - Mortality increases with age and higher with more underlying medical conditions, but even young healthy people die
 - Avoid long term health consequences – “long haulers” suffer prolonged extreme fatigue for months
 - 75% hospitalized patients suffer from at least 1 symptom 6 months later
 - 1/3 show evidence of heart inflammation (myocarditis) – unknown long term damage or effect
 - Lung damage, neurologic problems, loss of taste and smell
 - **Risks** – unknown long-term data but studies show excellent early safety profile
 - Allergic reactions rare (1:100,000) – epinephrine (Epi-Pen) effective
 - Short term side effects very common and reflect normal body response to vaccines and how our immune systems make antibodies
 - Headache, fever, chills, tiredness
 - Pain, swelling and redness at site
 - Moderna - higher rate of exaggerated delayed reaction (>day 5 upto weeks) – itchy, sore, swollen, red
 - Treatment: antihistamines, Motren/Tylenol, ice, steroid cr.



QDP policy = **strongly recommend** immunization, but not mandatory

COVID-19 VACCINATION STATUS						
	QDP Overall	NC	OH	TN	PA	GA
Vaccinated/Waiting List	50 %	63%	54%	30%	74%	28%
Undecided	34%	6%	27%	60%	16%	60%
Declined	16%	31%	19%	10%	10%	12%

Note: Most declining staff includes those previously infected and recommended to wait; contraindicated underlying conditions; and females of child-bearing age, which has no long term safety data

- CDC expanding vaccine prioritization
 - now recommends vaccine available for all >65 y.o. and anyone with 1 complicating risk factor/medical condition
 - GOAL = quickly increase number vaccinated to save most lives possible
 - All health care workers priority 1a
 - CDC releasing all doses but still recommends 2nd booster dose
 - Pfizer – 3 weeks
 - Moderna – 4 weeks
 - 4-day grace period early or later for booster shot
 - Obtain vaccine anywhere possible; neighboring county, pharmacy, health dept, hospital, vaccine fair at stadium/fair grounds – **not required to be in own county**
 - Studies show prolonged immunity of 8 – 12 months – likely need annual booster
 - Experts believe over many years C-19 will become like common cold

Please continue to stay safe and take care of yourselves, patients, teammates and families.

Mass vaccination is the best way to do this in my opinion so thank you to everyone who has already or is planning to be immunized. For those with concerns or questions, please feel free to contact me as many have already. I am happy to help address your hesitancy issues.

Sincerely,

Dr A